AMIGA
FORMAT

PLUS AMIGA SHOPPER supplement

3 DISK ISSUE!

AMOS PROFESSIONAL
AMIGA FORMAT
Disk 67a

AMIGA GOLD FORMAT 97%

AMOS professional!

Needs 1Mb

AMOS PRO: The ultimate BASIC programming tool for your Amiga! Worth £50!

ATR
ALL TERRAIN RACING: Exclusive Christmas tracks from Team 17's fab new racing game.

AMIGA FORMAT
Disk 67b

MERRY CHRISTMAS

Needs 1Mb

Sensible World of Soccer

SWOS: The ultimate demo of the best football game ever. With *AF* custom team!

The Lion King
AMIGA FORMAT
Disk 67c

THE LION KING: Exclusive! The first level of Virgin's latest Disney smash.

THE **LION KING**

AGA only

christmas presence!

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CD-rom

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...d this time they fight back.

PC   Amiga

AMIGA FORMAT

ISSUE 67 ■ JANUARY 1995

AMIGA NEWS

One of the stunning 3D images wowing the punters at the Computer '94 Show in Cologne, Germany.

Report from the Computer '94 Show p24

Graeme Sandiford mingles with 25,000 like-minded computer buffs. And lives to tell the tale.

MAIN FEATURE

How to get your game published p34

Don't miss your chance to win up to £1,000 in our *AMOS Pro* game-writing competition.

Everyone has a game inside them. (Or was that a book?) Anyway, we tell you how to make money from your creation.

SERIOUSLY AMIGA

SCREEN PLAY

Page 47

The *Amiga Format* team take on the rest of the world in *Sensible World Of Soccer.* p48

Every new Amiga game reviewed and rated!

Theme Park 500 (left) is a non-AGA version of the original *Theme Park* but now there are less rides and only youngsters attend the attractions. *Their Finest Hour* (above) may not be the most stunningly pretty game around but it wins a *Format* Gold for playability.

COVERDISK A:
AMOS PROFESSIONAL   p10

Write your own utilities, demos and even games with this powerful programming language. Then turn to page 41 for the chance to win up to £1,000 in our *AMOS Pro* competition.

COVERDISK B:
ALL TERRAIN RACING & SENSIBLE WORLD OF SOCCER

p15 &16

Race around on our special one-player *ATR* demo, then play probably the best football game in the world.
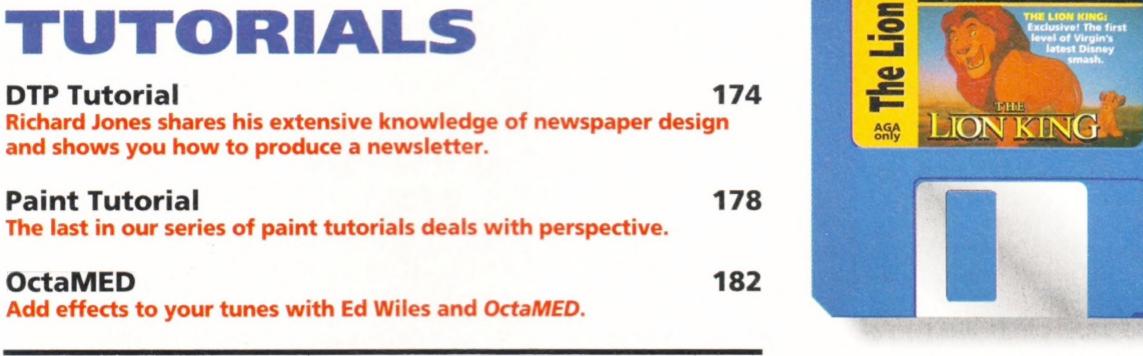
WELLA SHOCKWAVES COMPETITION   p64

Help design *Shockwaves Express* and win yourself an A4000!

TUTORIALS

COVERDISK C:
THE LION KING

p16

Another Disney film has been turned into an Amiga game. And boy does it look good! Turn to page 16 to find out all about it.

AF OFFERS

REGULARS

AMIGA FORMAT

More people read *Amiga Format* than any other Amiga magazine on the planet!

Welcome to *Amiga Format*. By choosing this magazine you have just made a very wise decision: this is the world's most popular Amiga magazine. And that means more Amiga users know us, trust us and choose to read us than anyone else.

Why? Because *Amiga Format*'s readers know they can trust our judgment and buying recommendations. Because we thoroughly test products, for one thing, and because we're not afraid to tell the truth. No matter how harsh it may be.

The proof? Commodore itself regularly chooses *Amiga Format* to prepare special editions of the magazine to be bundled with its machines. And surveys have consistently shown that retailers trust *Amiga Format*'s reviews above any other magazine.

So you know you can read *Amiga Format* with confidence. Welcome to the world's biggest community of Amiga users!

Steve Jarratt, Editor

future PUBLISHING

This year in view

Steve Jarratt looks back over 1994 – and bids farewell to one of the most tumultuous years in the history of Commodore and the Amiga.

As the giant 1994 logo sets slowly behind the pile of rubble that was last year, I thought it time to take a sideways glance at the previous 12 months of the Amiga and *Amiga Format*... 1994 was a funny old year. It started (as most years do) in January. The first signs of all's-not-rightness appeared when Dave Roberts wrote "Commodore has just announced another set of poor financial figures showing a whopping great loss. But the firm did predict the loss and insist that they will be back in the black for the quarter just ended." Oh will they?

Come February, Commodore were still bullish and a bit cocky: the big C placed a CD32 ad right next to Sega's HQ in London, reading "To be this good will take Sega ages." A jolly wheeze, but one couldn't help but feel that the billion Yen corporation were hardly quaking in their boots. However,

things still looked rosy with the news that 160,000 A1200s were sold over the Christmas period, while 70,000 CD32s were filling Xmas stockings.

Commodore's downward spiral continued in March with the news that Commodore Australia had gone into liquidation on February 11. A $40 million turnover could do nothing to prevent the down-under company going belly-up. Oddly, we stated that "all of Commodore's business in Australia will now be administered directly from the Asian subsidiary, which is based in the United States Of America." Naturally, if you want to run a company in India, you base it in the US.

As a cold Spring gave way to an equally cold Summer, May's issue of *AF* boasted the first pictures of Commodore's CD1200 – the long-awaited CD-ROM drive for the A1200. The big C unveiled their disc-spinner at the CeBIT '94 show, and we reported that "Commodore in the UK had tried to scotch rumours of such a device for several months, claiming that it wouldn't be economically viable." And it still hasn't appeared.

After several weeks of to-ing and fro-ing, editor Marcus Dyson decides to vacate the hotseat for a cushy number at Team 17. But no sooner had I settled into the executive swivel chair than June busted out all over! Top story this month is that Commodore US has gone into liquidation, and that the company – lock, stock and Amigas – is up for sale. But to whom? Top of the rumour mill are Amstrad, Hewlett Packard, Sony, Samsung, Nintendo and even Sam Tramiel!

Understatement of the month is from joint MD of Commodore, Colin Proudfoot, who states that "we have a cash-flow problem." The truth is that in 1993 Commodore lost $356.5 million worldwide! However, Proudfoot goes on record as saying, "There should be no impact in the UK marketplace. The brand is too strong to die: we're confident that Commodore will come out of this a better, stronger company." The take-over should be over in about a month. Or so they reckoned.

The sexy new A4000 tower

system arrived as well – just as all manufacturing in the Philippines ceased.

In July, while Commodore hummed and hawed about releasing the CD1200, Indi Direct stole a march on everyone with their Zappo CD-ROM drive. Not only does it free the trapdoor expansion slot by using the PCMCIA slot, but it can also play CD32 titles by software emulation of the CD32's Akiko chip. It sells like warm buns.

August signalled the fifth birthday of *Amiga Format*. And the old crock still managed to scoop everyone else to reviews of the new Zappo CD-ROM drive and Microbotics' SX-1 expansion unit which turns your CD32 into an A1200.

A new factor enters the Commodore equation in the shape of a management buy-out. The team, headed by David Pleasance, Colin Proudfoot and some of the US execs, look for an investor to stump up the necessary readies to prise Commodore from those who might use the Amiga's technology and not the brand. By all accounts, the MBO should only take a month or so to complete.

It's September and, surprise, surprise, the Commodore debacle is still dragging on. Latest news is that the red and blue 'chickenhead' symbol is to be no more. The management buy-out will rely on the name Amiga and ditch the ill-fated Commodore legend and logo.

A deadline for the MBO has been set in order to give the new company time to ramp up production before Christmas. So it'll all be sorted in a couple of weeks. Then.

The nights start drawing in and October happens – which, sadly, can't be said of the buy-out of Commodore. The MBO remains odds-on favourite to succeed and the new company will be called Amiga International. Or something.

Dave Pleasance makes a guest appearance at the Future Entertainment Show and tells all how the MBO will soon be sorted (though not in time to get A1200s in the shops by Christmas) and that the future of the Amiga lies in RISC technology.
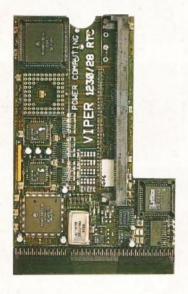
November appeared, as it always does at this time of year, and still no sign of any resolution to the Amiga's troubles. CEI (Creative Equipment International) of Miami make their presence felt in the last-minute bidding for the rights to the Amiga technology (see news story this issue). Most people now believe it's a two-horse race between CEI and the MBO. We wait with bated breath.

Actually, December hasn't happened for me yet, so it's a little difficult to comment on it. I guess all that remains is for me to wish you all a very happy Christmas, and to hope that Santa brings you loads of cool gear. Now if anyone wants to send me an A4000 with a Warp Engine and a copy of *Lightwave*...

6

AMIGA FORMAT COVERDISKS

WITH THIS MONTH'S COVERDISKS YOU CAN...
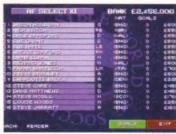
Write games, demos and utilities with *AMOS Professional*.

Experience thrills and spills with *All Terrain Racing* and play the finest game of footie ever – *Sensible World Of Soccer*.

Play the astounding *Lion King*. It's what we call a big game.

AMOS Professional

If you want to program with your Amiga then there's no better tool than *AMOS Professional*. Jason Holborn guides you through this powerful programming language.

Secured to the front cover of this issue of *Amiga Format* you'll discover what is generally regarded as the most powerful *BASIC* programming language ever released for the Amiga. Whether you'd like to try your hand at writing utilities, demos or even complete games, you'll find *AMOS Professional* the perfect tool for the job. What's more, *AMOS Professional* has one feature that makes it quite unique – it's very, very easy to use.

Despite its obvious power, *AMOS Professional* was designed to be very simple to use which is why it's based on the one programming language that most Amiga owners know fairly well – *BASIC*.

What this means is that if you have ever tinkered with *BASIC* before (most computers offer a *BASIC* language), you will feel instantly at home with *AMOS Pro*. But don't assume that *AMOS Pro* is just another *BASIC* language. Far from it – *AMOS*

Pro is head and shoulders above any other *BASIC* language you are likely to encounter.

This isn't just marketing hype either – thanks to *AMOS Pro*'s impressive command set (which, incidentally, contains no fewer than 700 commands – more than any other *BASIC* language), there's very little that *AMOS Pro* can't handle.

If you'd like to tinker with your Amiga's amazing graphics and sound capabilities, for example, then you'll love *AMOS Pro*'s vast range of dedicated graphics and sound commands. These allow you to perform all manner of wonderful effects such as screen scrolling, animating sprites, colourful 'copper' effects, multichannel music and sound effects, often with little more than a couple of simple commands.

If the thought of learning to program frightens you, don't worry – *AMOS Pro* really is blindingly simple to use. OK, so we're not going to

Another month and another quest for the best Coverdisk programs. And we have found four great programs and demos to keep you busy over the festive period.

AMOS PRO SPECIAL OFFERS

If you want to get the very best from your *AMOS Pro* Coverdisk, why not treat yourself to some of these wonderful support products. (Turn to pages 20, 121 and 172 for ordering details.)

ULTIMATE AMOS £19.95

This 400+ page book is the perfect companion for *AMOS Pro*. Bundled complete with a disk containing all the listings printed in the book, *Ultimate AMOS* guides you gently through the basics of programming (including how to use the *AMOS Pro* Editor and accessories) before moving on to more advanced areas such as screen scrolling, sprites and bobs, music and sound effects, AMAL (*AMOS Pro's* powerful animation language) and possibly the most in-depth guide to games programming ever published. With *Ultimate AMOS*, you'll learn how to write your own shoot-em-ups, platform games, *Gauntlet*-like maze games, adventure games and much more.

AMOS PRO MANUAL £17.99

Unlock the power of your *AMOS Professional* Coverdisk with the official *AMOS Pro* manual from Europress Software. It details how to use the *AMOS Pro* Editor and accessories and also lists and explains every single one of *AMOS Pro's* over 700 commands.
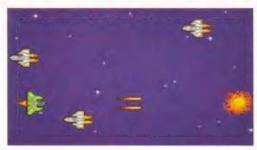
AMOS PRO COMPILER £34.99

Get your *AMOS Pro* programs running at full speed using the *AMOS Pro* Compiler. This invaluable utility converts your *AMOS Pro* source code to an executable file that runs faster than interpreted *AMOS Pro* code and can also be run independently of the *AMOS Pro* editor.

pretend that you'll learn to program a game like *Mortal Kombat II* in an afternoon, but you'll be surprised at just what you can do. Persevere and there's no reason why you couldn't use *AMOS Professional* to write your own arcade games – if you're a PD fan, for example, chances are you've already stumbled across plenty of examples of *AMOS*-generated games (some of which have even appeared on past *Amiga Format* Coverdisks).

Just to prove our point, we've included a selection of demonstration programs taken from the *Amiga Format* book *Ultimate AMOS*. These listings demonstrate a wide variety of *AMOS Pro* programming techniques including how to write a platform game, how to scroll a continuously changing background screen for a *Scramble*-like effect, how to generate wonderful multicoloured copper colour bars and so on. Study these listings

Create your own fantastic arcade games with nothing more than a dash of inspiration and *AMOS Pro*.

and have a go at modifying them yourself. If you'd like to learn how to program your own games in *AMOS*, then *Ultimate AMOS* (turn to page 172 to order your copy) is a must.

GETTING STARTED WITH AMOS PRO

AMOS Professional is a seriously big program. So much so, in fact, that we've been forced to crunch the program quite heavily – the original *AMOS Professional* package contains no fewer than six disks which we have managed to pack down on to just one.

Don't worry – the version of *AMOS Professional* on our Coverdisk is exactly the same as the full package minus a few demonstration and tutorial files. Other than these less than vital files, our *AMOS Professional* disk is complete.

In order to run *AMOS Professional* it must first be decompressed on to two separate floppy disks, so make sure you have two blank disks ready.

Just insert your *AMOS Professional* Coverdisk into your Amiga's internal disk drive and then switch on your Amiga and our decompression script will handle the rest – all

you have to do is to follow the on-screen instructions and swap disks when prompted. Once both disks have been decompressed, you'll have two disks – the *AMOS Pro* System disk and an Accessories disk.
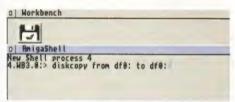
Before you can use *AMOS Professional*, it must first be decompressed on to two blank floppy disks.

BACKING UP YOUR COVERDISK

Copying your Coverdisk is very simple. Just follow the stages below...
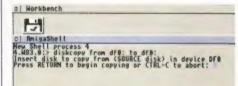
1 Boot up with your Workbench disk, and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.

```
□| Workbench
□| AmigaShell
New Shell process 4
4.WB3.0:> diskcopy from df0: to df0:
```
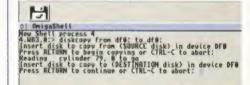
2 Type in the following line exactly as it appears here, taking care to put the spaces in the correct places:

DISKCOPY FROM DF0: TO DF0:

```
□| Workbench
□| AmigaShell
New Shell process 4
4.WB3.0:> diskcopy from df0: to df0:
Insert disk to copy from (SOURCE disk) in device DF0
Press RETURN to begin copying or CTRL-C to abort:
```
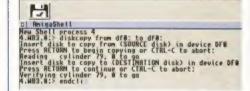
3 When asked for the source disk, insert the Coverdisk and press Return. All of the information on this disk will then be copied from the disk into memory.

```
□| AmigaShell
New Shell process 4
4.WB3.0:> diskcopy from df0: to df0:
Insert disk to copy from (SOURCE disk) in device DF0
Press RETURN to begin copying or CTRL-C to abort:
Reading cylinder 79, 0 to go
Insert disk to copy to (DESTINATION disk) in device DF0
Press RETURN to continue or CTRL-C to abort:
```

4 Once your Amiga has read the info, it will ask for the destination disk. Insert the disk you want to copy to and press Return. All information on this disk will be destroyed.

```
□| AmigaShell
New Shell process 4
4.WB3.0:> diskcopy from df0: to df0:
Insert disk to copy from (SOURCE disk) in device DF0
Press RETURN to begin copying or CTRL-C to abort:
Reading cylinder 79, 0 to go
Insert disk to copy to (DESTINATION disk) in device DF0
Press RETURN to continue or CTRL-C to abort:
Verifying cylinder 79, 0 to go
4.WB3.0:> endcli
```

5 On an unexpanded machine, the Amiga may ask for the source disk again, as it copies in chunks. Finally, type Endcli to close down the Shell. Your copy is complete.

DISK NOT WORKING?

We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any data loss or other damage occurring during its use. If your disk is faulty, send it back, including a stamped addressed envelope for a free replacement to:

Amiga Format (insert the name of the disk) Disk, Discopy Labs Ltd, PO Box 21, Daventry, NN11 5RT.

The AMOS experience

ACCESSORIES

Most of the programs that you write with *AMOS Pro* contain more than just lines of code. A game, for example, requires background graphics, sprite and bob images, sampled sounds and music.

Although *AMOS Pro* doesn't cover all of these areas (you need a paint program like *DPaint* to create background graphics and title screens), it provides a wide range of accessory programs – one for editing the imagery of your sprites and bobs, another for creating sample banks and so on. All these accessories can be loaded from the *AMOS Pro* accessories disk (the second disk you decompressed) by selecting the appropriate option from *AMOS Pro's* User pull-down menu.

OBJECT EDITOR: The Object Editor is used to edit the appearance of the sprites, bobs and icons (rectangular blocks of graphic commonly used for game maps) used by your *AMOS Pro* listings. Such objects are held in what *AMOS Pro* calls banks which are collections of the same object stored as a library.

The Object Editor is a glorified paint program that has been geared towards the task of drawing sprites and bobs. As well as a wide range of drawing tools, it also allows you to manipulate banks by inserting new objects and deleting objects you don't want. The two pull-down menu options Edit Objects and Edit Icons both load the Object Editor.

RESOURCE EDITOR: The Resource Editor is one of *AMOS Pro's* more advanced editors because it is used to pull together resource banks for use with *AMOS Pro's* Interface language. Resources are used to build powerful user interfaces for programs.

SAMPLE BANK MAKER: This enables you to collect together two or more IFF sampled sounds into a sample bank. Each sample can be edited just like a sample editor – that is, you can cut, copy and paste sections of sample data and so on. Samples can also be fine tuned.

DISK MANAGER: A directory utility along the lines of *Directory Opus*. And like *Opus*, the Disk Manager lets you copy, delete and rename files as well as a whole host of other common disk operations, therefore removing the need to leave *AMOS Pro* to access the *AmigaDOS* Shell.

THE AMOS PRO EDITOR CONTROL PANEL

Once you've decompressed the two *AMOS Pro* disks, insert the *AMOS Pro* System disk into your Amiga's internal drive and then switch on. After a few moments' disk access, the *AMOS Pro* Editor appears. Click the left mouse button to get rid of the status box and the *AMOS Pro* Editor springs to life. The bulk of this screen is taken up by the source code window – that is, the area that displays your source code and where all editing of that code takes place. Running along the top of the *AMOS Pro* Editor screen are a row of icons which you'll need to get to grips with. Here's a run down of what they do.

DIRECT MODE: The Direct Mode icon switches *AMOS Pro* to direct mode, the part of *AMOS Pro* that provides direct access to the *AMOS Pro* Interpreter (the bit that actually runs your programs). Direct Mode allows you to enter *AMOS* commands which are performed immediately rather than en masse like an *AMOS* listing. Pressing the Escape key has the same effect as selecting this icon.
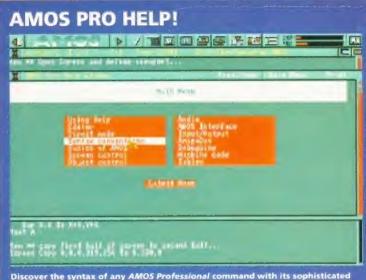
RUN: Once you've typed in your *AMOS Pro* listing, clicking on this icon forces *AMOS Pro* to actually perform your listing.
Pressing the F1 key does the same job.

TEST: This icon lets you check your *AMOS Pro* listing for any errors without actually running the program. If an error is encountered, *AMOS Pro* moves the cursor to that line.

INDENT: The indent icon attempts to make your listings more readable by indenting code held within loops and program control structures.

AMOS PRO HELP!

Discover the syntax of any *AMOS Professional* command with its sophisticated on-line help facility.

Documenting each and every one of *AMOS Professional*'s 700 plus commands within the pages of *Amiga Format* is impossible because we just don't have the space. To make your life easier, however, *AMOS Pro* has its own on-line help facility which not only provides in-depth information on how to use the *AMOS Pro* Editor, but also documents every single *AMOS Pro* command!

To access *AMOS Pro*'s on-line help, press the Help key on your Amiga's keyboard. If the cursor has been positioned over the first character of an *AMOS Pro* command, the on-line help jumps straight to the information on that particular command. If, on the other hand, the cursor is sat on a blank space, online help will start from the main menu.

Using online help is very simple indeed because it's completely menu driven. Selecting the information you want is simply a matter of clicking on the label for that information – clicking on the Basic of AMOS label from the main menu, for example, brings up another menu listing lots of further menu options which, in turn, gets you that bit closer to the information you want.

One thing worth noting, however, is that the on-line help also lets you automatically load demonstration files which show a particular command in action (the command's name appears as red text on a black background which can be clicked upon to load the demonstration). In order to squeeze *AMOS Pro* on to a single disk, we were forced to drop these tutorial files and so the facility to load a demonstration is not available with our Coverdisk.

NEXT MONTH!

Now that you've seen what *AMOS Pro* is capable of, stay tuned for the next issue of *Amiga Format* in which you'll find the first installment in a regular series of *AMOS Pro* programming tutorials. Find out how to program your own *AMOS* games the easy way!

YOUR FIRST PROGRAM

Now we've looked at how to use the *AMOS Pro* Editor, let's get stuck into some coding. Type in the following listing for a demonstration of *AMOS Pro*'s powerful screen scrolling and blitter object commands.

```
Rem *** My First AMOS Pro Program!!!

Rem *** Open Screen and define viewport...
Screen Open 0,640,256,16,Lowres
Flash Off : Curs Off : Cls 0
Screen Display 0,128,40,320,256

Rem *** Define copper colour effect...
Set Rainbow 0,0,280,"(18,1,15)","",""
Rainbow 0,0,0,280

Rem *** Load Bobs from disk...
Load "AMOSBOOK:AbkFiles/SpaceShip.ABK"
Get Sprite Palette

Rem *** Draw colourful boxes...
For A=1 To 100
    X=Rnd(320)
    Y=Rnd(256)
    S=Rnd(50)+10

    Ink Rnd(15)+1
    Bar X,Y To X+S,Y+S
Next A

Rem *** copy first half of screen to second half...
Screen Copy 0,0,0,319,256 To 0,320,0

Rem *** Double buffer screen for smooth movement...
Double Buffer

Do
    For A=0 To 319 Step 4

    Rem *** Update bobs...
    Bob 0,80+A,40,FRAME
    Bob 1,130+A,80,FRAME
    Bob 2,180+A,120,FRAME
    Bob 3,130+A,160,FRAME
    Bob 4,80+A,200,FRAME

    Rem *** Update Bob animations...
    If FRAMEDELAY=4
            Add FRAME,1,1 To 8
            FRAMEDELAY=0
    Else
            Inc FRAMEDELAY
    End If

    Rem *** Scroll screen...
    Screen Offset 0,A,0

    Rem *** Synchronise screen update...
    Wait Vbl
    Next A
Loop
```

OK, so it's not quite *Project X* but even this little program demonstrates *AMOS Pro*'s powerful graphic capabilities.

MONITOR: The Monitor icon initiates *AMOS Pro*'s powerful monitor tool that is used to debug *AMOS Pro* programs.

HELP: The Help icon brings up *AMOS Pro*'s useful on-line help facility. This help facility allows you to obtain detailed information on any of *AMOS Pro*'s 700 plus commands.

SEND TO BACK: Working with several listing windows at once can be confusing, so the *AMOS Pro* Editor offers two options that allow you to arrange listing windows. Send to Back sends the active window behind any others that are currently open.

BRING TO FRONT: Another window arrangement function is Bring to Front which is used to bring the currently active window to the front of all others.

INSERT: The Insert function inserts a blank line at the current cursor position.

FOLD/UNFOLD: The Fold/Unfold icon opens and closes procedures. Pressing the F9 key has the same effect.

EDIT MODE: The Edit Mode icon switches the text editing mode between insert (characters are inserted between existing ones) and overwrite (new characters overwrite old ones).

WB: The WB icon switches *AMOS Pro* back to the Amiga's Workbench screen, allowing you to run other programs simultaneously. If you need to switch back to *AMOS Pro*, just press the Left Amiga and A keys.

MEMORY: These two bars graphically display the total amount of Chip and Fast memory available to your *AMOS* programs.

Sensible World Of Soccer

With Holborn in goal, Grant and White solid at the back, Garford's ball skills, and Bradley leading the line, the *AF* XI is just one of the delights of this great demo.

Undoubtedly, the *AF* team could soundly thrash AC Milan at writing Amiga mags, but can they beat them at footie?

Sensible World Of Soccer. The game of the decade. Harps are plucked, the skies open and verily, the angels come down from the heavens clutching *AF*'s exclusive Coverdisk demo. On giant, crashing waves.

We have the best league in the world, Italy's Serie A, and Serie B thrown in for good measure. And in an act of monumental self-indulgence, dear readers, we offer you the chance to player-manage, or manage an *Amiga Format* Select XI through a season in Italy, pitting your wits against the world's top players. Roberto Baggio, Ruud Gullit, Ruben Sosa, Franco Baresi, Paul Gascoigne. And erm, David Platt.

There are two basic options in the demo. You can play friendlies between one or two players choosing from a staggering 40 teams (some demo, huh?), or you can play the Demo League where you manage the *Amiga Format* Select XI, choosing their tactics (the midfield combination of Jones, Garford, Bartucca and McGill is dynamite), buying and selling players, checking the club finances and even monitoring the progress of teams in the English and Scottish leagues.
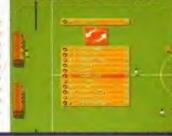
You can even import English Premiership players if you trawl the foreign transfer market. So if you don't want to keep the bloke called Jarratt in the team, preferring perhaps to sign Les Ferdinand, then simply bung Mr Jarratt on the transfer list and hope

Waggle the joystick in one direction three times and you bring up the bench where you can change tactics or make a substitution.

Every player is valued and the higher the price, the better their ability to control the ball. Messers Jarratt and McGill are... (*Blessed with delightful ball control – Ed*).

that one of England's top strikers becomes available. Remember, the higher value a player has, the faster and more skillful he is likely to be.
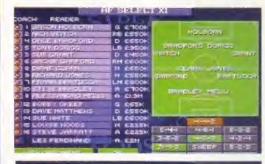
Disappointed that you didn't get to manage Manchester United in the demo? Tough. But you can still watch all their games during the season. Indeed, you can follow the fortunes of any English Premiership, First Division or Scottish Premier League team. Marvellous, eh?

What are you waiting for. Play. And look out for the full version in the next few weeks which features virtually every club and international team in the whole world. Which is even more than are on this demo.

You can check out *AF* Select's forthcoming games, view the financial situation and sell McGill.

A ridiculous sum, I'm sure you'll agree readers. You can't turn down that sort of money for those players.

TECHNICAL INFORMATION

The *Sensible World Of Soccer* and ATR Coverdisk has loads of data on it. You need to decompress it. It's easy. Format two blank disks and load up the demo, following the instructions carefully. It will take a few minutes, but hey, they're great demos. It's worth it. Trust us.

ATR

Pitch your buggy against the best of the rest in the wonderful *All Terrain Racing*. You can even race on the special, snowy Christmas track.

N ot to be confused in any way with the *Scalextric*-wannabe *TCR*, our Christmas *ATR* demonstration offers you almost total control of a small, and somewhat cuddly buggy. And if you wish, an 'old china' can join in and you can race head-to-head, as it were. Yes readers, this demo is for one or even two players.

After their previous, and rather disappointing effort at producing a racing game, *Overdrive*, Team 17 are determined to set the top-viewed car game record straight. *ATR* looks set to do so. Race though a Christmas fairyland, with snow and trees with lights and stars. Avoid cones. Drive over power-ups. And look out for Father Christmas and one of his red-nosed reindeer perched on the roof of a particularly winsome log cabin. Team 17 obviously slipped up somewhere along the line

though, for we spotted three Santas of the Claus variety, and as we all know, there is only one St Nicholas. But perhaps he jumps up and flies to another cabin as soon as you've sped past. Yes, that'll explain it.

In one-player mode, you're kindly invited to spend some money in a shop which sports a variety of extras for your new motor. Special power steering is a bargain at only $200 (yes, you are in the Americas). It's perhaps unwise to purchase armour. Our demo contains no weapons, but

we're reliably informed that the full version, as well as featuring numerous courses and cars, will also contain elements of Dick Dastardly-esque foul play. All the more reason, we suspect, to look out for the full and, of course, definitive *Amiga Format* review next month.

Our one-player demo features the Christmas track and a Grand Canyon-and-rivers affair. Two players can but hurtle around the winter wonderland attempting to speed to the top of the screen ensuring your opponent drifts off the edge giving you one wondrous point. So drive.

ATR is the latest top-view racing racing game, similar, in some ways to Codemaster's excellent *Micro Machines*. Though perhaps a little more formal. But we think that you'll think it's great.

You can upgrade your motor to enhance the performance but ultimately, winning depends on whether Schumacher can knock...

In the two-player mode, you have to amass a certain amount of points for victory.

Lion King

Disney's gorgeous film is now a lovely computer game. And we've put this adorable platformer on our Coverdisk. What better way to spend Christmas?

T he biggest film of the year is now, not surprisingly, a computer game too. You are Simba, and you have to kill the nasties. Pressing the fire button makes the beast growl like next doors' ginger tom. It's an easy demo to complete (but a heck of a lot of fun) so we won't tell you any more.

If you don't possess an AGA machine, our apologies. You won't be able to play the demonstration, nor will you be able to purchase the finished product. Well, you can, but you'll be wasting your money. You'll just have to take our word for it that it's an incredibly pretty game. Or perhaps you can glance sideways at one of these screenshots.

For those with the requisite chips, there is no intro screen, and when you've completed the demo, which is almost inevitable, the screen freezes and to play again you must reboot. The same applies if you lose all your lives – the screen goes black, yet the quirky tune continues. Again, you have to reboot.

Ultimately, you have to beat the hyena-type chap. The best way is to jump on his head when he's panting.

Go on little fella, you can get up there. *Lion King* is blessed with some glorious graphical touches.
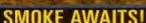
AMIGA FORMAT COVERDISKS

Your Coverdisk should be working fine, but if not, these hints, tips and corrections may sort out the problem for you quickly and easily.

EXTRA!

MUSIC-X AF58

A600 owners, and anyone else with only Chip RAM, should follow the instructions for A1200 owners, otherwise they will find they have little room for samples. Also, many people seem to be getting a message regarding missing fonts. The fonts are on the disk, OK! If you boot up from the *Music-X* program disk, like it says to do in the instructions, there is no problem.

If you want to boot off any other disk, copy the fonts into the FONTS: drawer of your boot-up disk. This is not complicated – it is how the Amiga works (and the PC and the Mac).

PAGESETTER 2 AF63

There are no problems with this program, but a few people seem to be having difficulty with fonts. *PageSetter 2* works with CompuGraphic fonts, but it needs an .atc file. If your font doesn't have one, *PageSetter 2* won't recognise it.

THEME PARK AF64

Not a problem, but a cheat for this rather good demo of a rather excellent game.

If you press the C key during the loading screen a message appears, informing you that the cheat mode is active. You will now have lots of cash to buy oodles of rides and things!

AND FINALLY...

Not a problem or anything, but an example of what someone has done with their Coverdisk, in this case the *Imagine* disk we gave away all those issues ago (*AF53*).

There is a sad aspect to this tale though. This model of the T-65 X-Wing fighter is so large that its creator, Simon C Embley, hasn't actually got enough RAM to render it in its entirety.

So, for all you other aspiring *Imagine* modellers, Simon's picture is something to aim at, and for Simon, here is what your model actually looks like...

PAGESETTER 3

Although it is not actually a Coverdisk, some of you have been experiencing problems with *PageSetter 3*, the upgrade to our great *PageSetter 2* Coverdisk (*AF63*).

The problem seems to involve people running this software from a floppy drive. It has to be said that Gold Disk's install script and documentation are less than perfect.

Firstly, you do not actually have to run the floppy install program to run the software, you can just boot from disk one and run the program from disk two (although the print option will not work). To solve these problems, the easiest thing to do is make some additions to a copy of your Workbench disk. Here are the steps you should follow:

1. Make a copy of your original Workbench disk, or your usual start-up disk.
2. Using a text editor (such as *ED*), add the following to your start-up sequence (before the ENDcli command), or your user start-up if you have one.

   Assign Fonts: PS3Fonts:Fonts
   Assign CGFonts: PS3Fonts:Fonts
   Assign s: PS3Page:

3. Now save the file (using Escape then x if you are using *ED*) and reboot your machine with this disk.
4. From Workbench, select and delete the Tools and Utilities drawers (or otherwise make room for the library files).
5. Open a Shell and type the following:
   copy PS3Install:s/page#? s:
   copy PS3Install:libs/FontEngine.library Libs:
   endcli

(If you are using a GB keymap, the superscript 3 is obtained by pressing Alt-3)

6. Reboot from this disk again. Insert the PS3Page disk and double-click on the program's icon. It should now run, and print to your selected printer.
7. To install more fonts, you should use the original Install program, because this updates the special font list *PageSetter* uses to tell which fonts are available.

AMIGA FORMAT PRESENTS

There's only one thing better than our Coverdisks and that's the latest upgraded and enhanced versions. And they're all at special *AF* prices.

KCS 3.5 LEVEL II

£69.99

When we reviewed this incredible music package (*AF29*) we awarded it the coveted Gold rating (a whacking 92%) and that was with a retail price of £279. We said: "Contains all the elements you could possibly need to use your Amiga in a serious environment". *KCS 3.5* is much more than just a sequencer, it also contains a whole host of functions, in a multi-program environment (MPE), to allow you a great deal of flexibility in creating music: record notes in KCS, edit them in *Tiger* and print out your score using *Quickscore*.

*KCS 3.5 requires 1Mb RAM, although 2Mb, a hard drive and a MIDI interface is recommended.

ORDER NO: AMFKCS

TV*TEXT PROFESSIONAL V2 FULL PACKAGE

save £40

£89.99

Our *TV*Text* Coverdisk was ideal for those exploring the joys of video titling for the first time, but this new version will give your titling a whole new dimension.

This brand-new-direct-from-the-USA version includes AGA support, which allows up to 256 colours on screen, it permits text to be typed directly on-screen, provides full outline font support – so you can squash, stretch and scale your fonts without any loss of quality. It also includes a *Player* program, allowing images to be scripted and sequenced, and contains wipes, fades and other effects. In addition to the original 220-page *TV*Text* manual (also available separately) *v2* contains an AGA manual and five extra disks packed with 50 outline fonts for use with *TV*Text* and other packages that support outline fonts. *AF* Gold-rated.

ORDER NO: AFTVTF

TV*TEXT PROFESSIONAL V2 UPGRADE

£59.99

With the exception of the original 220-page *TV*Text Professional* manual and the five disks of outline fonts, this *TV*Text V2* upgrade contains everything that is in the full *v2* package.

If you have previously purchased the manual or already have access to a wide range of fonts, this option is definitely the right one for you.

See your titles come to life with the extra enhancements of this AGA version. For detailed specifications please see the description of the full package above.

ORDER NO: AFTVTU

1MB RAM UPGRADES

£29.99

If you have less than 2Mb RAM these days, you are at a serious disadvantage, so take this opportunity to upgrade your system at an astonishingly low price. These boards for the A500+ and A600 simply plug into the Amiga's trapdoor connector without invalidating your warranty. Manufactured to the highest standards and fully guaranteed for 12 months. Upgrading to 2Mb will give both your machine and your productivity a boost.

A500+ ORDER NO: AFSP1M   A600 ORDER NO: AF6H1M

PIXEL 3D PROFESSIONAL V2

£129

If you've been using our incredible *Pixel 3D Professional v1* Coverdisk (*AF65*), you'll know exactly what to expect with this bang-up-to-date upgraded version. *Pixel 3D Pro v2* is one of the most powerful 3D object utility programs available. *Version 2* includes the following enhancements:

- Z-buffer full-colour viewing modes.
- Real-time 3D painting.
- Complete AGA support.
- Complete PostScript support.
- Object hierarchies support.
- Improved DFX AutoCAD support.
- Loads 17 different 3D file formats including *Lightwave*, *3D Studio* and *Imagine*.
- And much more...

Version 2 of *Pixel 3D Professional* can also convert bitmap pictures of logos and shapes to 3D with unrivalled speed and quality. *Amiga Format* readers can upgrade to *Pixel 3D Professional v2* for just £129 – £70 off the RRP.

**Please note: *Pixel 3D Professional v2* requires Workbench 2 and 2Mb RAM.

ORDER NO: AFP3D2

AMIGA FORMAT news

- **Maxon takes Cologne show by storm**
- **Fish and Richter make show appearance**
- ***Rise Of The Robots* TV ad controversy**
- **Commodore latest**

PHASE 5 CYBERSTORM

Phase 5 previewed their new CyberStorm 060 accelerator for the A4000. Although not in full production due to difficulties in getting hold of 060 chips, a pre-prod model was being put through its paces. The board produced some incredible results. The texture examples scene supplied with *Lightwave* took 54 seconds to render compared with the A4000 040's 3 minutes, 42 seconds. An 040 version of the board will also soon be in production as will the latest version of the Blizzard boards for the A1200. UK prices and distributors have not been announced yet, but if you want to find out more call Phase 5 on 01049 69 5481844.

TURBOCALC V3.0

The latest revision of *TurboCalc* was available – but only in German. This upgrade of the program now has a drag-and-drop feature, more macros, it can link cells of different worksheets, overlay text and diagrams and has even more control of text attributes. *TurboCalc* will soon be available from Power Computing who can be contacted on 01234 273000.

Computer '94 Show report

Graeme Sandiford reports from the Computer 94 Show in Cologne.

The mammoth Computer 94 Show in November took up two whole floors of the massive Cologne Messe complex and attracted over 25,000 visitors from around Europe, on the Saturday morning alone, all eager to get their mitts on the latest computer hardware and software.

Computer '94 is a multi-format show. However, unlike most other shows, a large number of stands were devoted to serious Amiga products.

MAXON SHOW SENSATION

Although *Lightwave* is being sold by the bucket-load in the UK, I didn't see a single person with a copy at the show. Instead, one or two copies of *Lightwave* were sitting untouched on shelves. This is not because the German Amiga-users have no interest in 3D graphics, but because they are buying another product in huge quantities – *Maxon Cinema 4D Pro 2.0*.

I tracked down the *Maxon* stall to find out why everyone was buying this package, instead of following the trends of the rest of Europe and the States. I met up with the programmer, Philip Losch, and one of the Beta-testers who took me through the features of this incredible program.

One of the best features of *Cinema 4D* is its interface which combines some of the best features of other 3D packages – and it also only costs 448DM (about £200). You

are given a choice of several views, ranging from the more traditional quad-view right through to a real-time perspective. To keep things easy, virtually all of the program's features are available from the two button banks on the screen.

Cinema has most of the features of *Imagine*, yet combines this with the ease-of-use of *Lightwave*. It doesn't have that many revolutionary functions, but offers a greater degree of control over the usual elements and numerous smaller features.

It can animate textures and materials, so you can animate an object's attributes such as changing fog values over a period of time so it appears to de-materialise. You can also apply bump, transparency and luminance maps and even control the amount of effect a bump has by adjusting a slider so the effect can be subtle or extreme.

VIDEO BLISS

If you are a video enthusiast you'll be glad to know that ProDAD are poised to release *ClariSSA 3.0 Professional* on to the UK market – you can expect to see it in the next few weeks. It's currently selling in Germany for 449DM, which works out at about £200.

This latest version of the great animation optimiser and editor has a host of new features. Perhaps the most impressive one being an astounding 80% increase in animation playback speed – as if it wasn't fast enough already.

Playback from disk is possible now and new animation tools have been added. And the program has some new effects tools (such as wipes and fades) and a set of anim tools that can be expanded. It is also possible to combine animations even if they are of different

resolutions and colour-depths. Thanks to the program's modular design, you'll be able to add more tools and features as they are released and even create your own. There are loads of other new features and the speed of *version 3.0* is guaranteed to amaze.

ProDAD have also been busy updating *Adorage* and producing a new video titler called the *Monument Titler. Adorage 2.5 AGA* will sport a host of new effects and will have on-line help through the *AmigaGuide* format. As with *ClariSSA* playback speed has been enhanced.
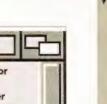
Adorage Version 2.5 now supports more file formats, such as GIF and PCX and can save its animations in a variety of formats. *Adorage 2.5 AGA* will be available early in 1995 and will probably cost about £100.
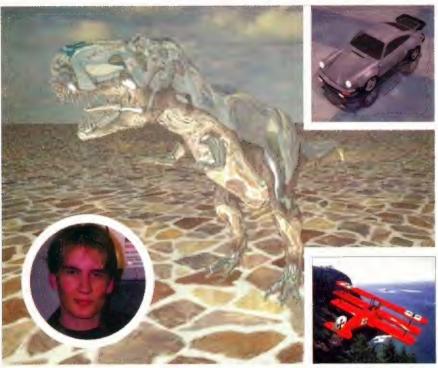
Monument Titler is a new titler that provides all the standard features of a titler and more. It has a variety of built-in effects, text styles and fills and can load

Adorage 2 AGA will soon be updated by Version 2.5 AGA which was previewed at the Computer '94 Show.

CompuGraphic Fonts. It has extensive font scaling and anti-aliasing abilities too. It also utilises the SSA animation format, supports timeline editing and has a versatile scrolling function. *Monument Titler* should also cost about £100.

ProDAD's current UK distributor is Burgess Video, who can be contacted on 01874 611633.

Maxon Cinema 4D Pro 2.0 programmer Philip Losch with some examples of what the program is capable of. *Maxon* is incredibly popular in Germany, but will we see it in this country?

In the modelling department, the program can load a variety of formats such as *Imagine*, *Sculpt* and *DXF*. It has extensive modelling tools including splines, morphing, Boolean operators and even a fractal landscape generator. It also has a large number of primitives, which you can add to by using the object library.

The program's Animation Editor is also impressive, like *Lightwave* it can be used as a key-frame system. However, one of its best features is that you can assign the motions of one object, or group of objects, to another. The program is actually supplied with a mannequin-like (hierarchically constructed for natural articulation) object that can be used to animate your own humanoid models.

Another good feature of *Cinema 4D* is that you can see a representation of an animated texture's position so you can

easily key-frame its movements on the object's surface.

There are loads more features, but despite being such a powerful and easy-to-use package, we may never see a copy over here. The reason is that Maxon are

Cinema has most of the features of *Imagine*, yet combines this with the ease of use of *Lightwave*.

reluctant to commit large sums of money in order to translate the manuals if there is not going to be sufficient demand. So if you would like to get hold of a 3D animation package that combines the best of *Imagine* and *Lightwave*, contact Maxon's UK distributors, HiSoft on 01525 718181.

AMIGA LEGENDS

Not only did the show attract Amiga users from all over Europe, it was also graced by the attendance of a couple of celebrities. German 3D modeller and animator Tobias Richter and PD and Shareware guru Fred Fish were both present.

Richter attracted huge crowds on the Maxon stand, where his latest demo tape had everyone enthralled. He also had a selection of objects for sale which included the Millennium Falcon, Seaquest DSV and several other sci-fi-related images.

The near-legendary Fred Fish

Two major Amiga personalities turned up at the Show – PD guru Fred Fish (inset) and 3D animator Tobias Richter.

was also on hand, promoting some of his new CDs. He also attracted large crowds, all of them eager to get hold of the latest CDs and, of course, to get them signed by the man himself. Some of the new CDs that were available included *Fresh Fish Volume 7*, *Fresh Fonts*, *AmiNet 4* and *AmiNet Gold*.

Jeff Walker Column

There is no excuse for releasing buggy software, no matter what its cost. By buggy software I don't mean software with bugs in – a few bugs can't be helped, as any programmer will tell you – what I mean is software that contains very obvious bugs that cause the computer to crash and make the software extremely difficult to use – bugs that you know the developers are aware of but have not been able to fix.

Then there's unfinished software. Software which contains bugs not because the developers can't fix them but because they haven't actually finished the software.

I guess we have all suffered this type of software, a lot of us very recently with *Wordworth 3* and *PageStream 3*, neither of which is cheap. The instant reaction is anger and the end result is unhappy customers. Even laid back dudes like me who let life flow right over them (man) are left with this little knot in their stomachs which no amount of transcendental meditation and vegetable matter can untie. So why do they do it? Let's try to look at it from their point of view. So this (fictional) company have been developing the new version of their (fictional) software for a year or two. Sales of the current version are tailing off and there is less and less money coming in to the company, while overheads are probably rising.

At some point the person in charge of finances will pull out a cash flow forecast which shows that in six, 12 or 18 months the company is going to have a problem unless there is an injection of cash. So The Powers That Be get their heads together and study the cash flow. They see the simple solution. Come hell or high water their new software must be on sale by a certain date. Then they point a gun at the development team by setting and announcing the launch date.

Now then. It's very easy to say that if the software isn't finished by that date then it shouldn't be released. But in this business deadlines have to be set and stuck to. Leave it to programmers and the well-known creeping features syndrome will take over; the software will never get finished because someone or other keeps coming up with new ideas and/or new ways of implementing old ideas. And every time you write some new code, another few bugs are born. At some point you have to stop actually developing and start fixing bugs. That's what launch dates force programmers to do. Launch dates force them to eat their greens.

So, when buggy software is released it usually means that they didn't stop developing early enough. They release the software anyway, and then spend the next few months fixing the bugs, normally promising all their customers free upgrades. Sadly, this means paying anything from nothing to a very small amount for shipping, to rather more because "we've added new features as well as fixed the bugs", which is a scam that should be outlawed.

None of the above is an excuse for releasing buggy software, merely one reason why it might happen. And it seems the bigger the program, the more likely it is that the first release of it will be ridden with bugs or unfinished features.

So is there anything we consumers can do about this? Well, yes, there probably is. The problem in the above scenario is the cash flow. If the cash was flowing, the software wouldn't have had to be released so early. So we could help, in the long term, by buying software rather than waiting or taking an illegal copy. Always assuming, of course, that our cash is not going to be used to finance that fleet of Porsches in the car park.

The opinions expressed in The Jeff Walker Column are not necessarily those of *Amiga Format*.
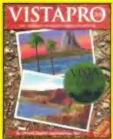
Time Warner's tough-talking ad for *Rise Of The Robots* has incurred the wrath of TV watchdogs.

AMIGA FORMAT games news

All the latest news and inside stories from the world of Amiga games: the roughs, the rises and the robots...

Robots ad banned from kids' TV

The television advertisement for Time Warner's *Rise Of The Robots* has been KO'ed by the Broadcast Advertising Clearance Centre, the association responsible for vetting television advertisements. BACC took particular exception to a scene in the ad in which an imposing military droid from the robot combat beat-em-up taunts the audience with the line 'are you religious?'.

As a result of the Broadcast Advertising Clearance Centre ruling, the *Rise Of The Robots* advertisement has been banned from being transmitted during all religious broadcasts and children's programmes although it can still be transmitted during less sensitive time slots.

The 60-second commercial features a Mary Whitehouse-like figure complaining about computer games and extolling the virtues of the innocent pastimes enjoyed by her generation's youth.

Black and white 1950s images are suddenly shattered as 3D-rendered droids from the game crash into each scene accompanied by such headlines as 'you can't dance with broken legs!'.

"This advertising campaign has been designed to make people sit up and take notice," commented Time Warner spokesman Jeff Tawney.

"We've combined some amazing graphics from the game with really aggressive and humorous captions. If some people find it offensive, that's tough. Our customers love it!"

● Turn to page 70 to find out why we gave the much-hyped *Rise Of The Robots* a miserable 19 per cent.

niblets

NICE PIECE OF CLOTH

Vileda have stepped into the age of information technology with the launch of their new hi-tech Microclean cloth, a safe, economical and easy way to clean computer monitor screens. Using leading edge microfibres, Vileda's new Microclean cloth has been specifically designed for cleaning monitors and, as a result, does not require expensive chemicals – simply wet the Microclean cloth and drag it across your monitor screen and Microclean lifts dirt and grease without scratching.

PAPER LEMMINGS

Still struggling to complete Psygnosis' *Lemmings*? If so, then Kuma's new book *Lemmings: The Solutions*, is for you. The book guides you through each level to uncover paths where few lemmings have gone before. Kuma are on 01734 844335.

BIG FES HELLO

A big *AF* 'hello' goes out to Team Lee who hassled us at the FES. Hi!

Pussy power

Pussies Galore. Amusing title, eh? It's a platform game and it belongs to Wakefield funsters Team 17 and involves heavy metal music, cats, four worlds, missions galore and a plethora of kittens. Scheduled for release in March, it will be making an appearance on the A1200 and CD32.

Kick Off 3 European Challenge boasts 120 European league teams.

Vulcan Software's follow up to *Valhalla* is the suitably-titled *Valhalla Before The War*. Apparently, The Lord Of Infinity has been jealous of his brother Garamond (who wouldn't be jealous of a chap with such a fine moniker?), The King Of Valhalla, for simply an age. As Infinity's mentor, your task is to murder old Garamond. There are four huge levels, characters aplenty and lots of speech. And January is the time of arrival.

Frontier: Elite II was a popular game. So popular in fact that a sequel is planned. Called *Frontier: First Encounters*, the action takes place in an allegedly astronomically-correct universe, and in 'full 3D'. What's half 3D? So in the early part of 1995, many of you will be flying through space, trading and battling with aliens. Although you'll still be in your bedroom. For A1200 and CD32 only.

'Turbo charged' screams the press release. The new *Kick Off 3 European Challenge* has few motor vehicles but it does have 120 teams, each with different styles of play. Spanish, French, German, Italian and English leagues are included plus all the World Cup teams. The teams play in different ways, so the Spanish have flair, the Italians are defensive and the English are.... Well, it doesn't say on the press release but they're probably reasonable. Out soon.

ZEEWOLF NOT WORKING?

If you have a certain type of disk drive, this is exactly the sort of scene you wouldn't have seen with our demo of *Zeewolf*.

The demo of *Zeewolf* on AF66's Coverdisk has upset some of the disk drives out there in *AF* reader land. Binary Asylum's special loader conflicts with some of the drives installed in A500s, A600s and A1200s.

Binary Asylum insist that this problem only occurs with a few of the first games mastered: the fault has been eliminated from later batches, so don't worry about the full game not working on your machine if the demo refused to load.

Similarly, if you've bought the full game of *Zeewolf* and it won't load, send it back to Binary Asylum and they'll personally re-master your disk. Faulty disks (minus the packaging) should be sent to: *Zeewolf* Returns, Binary Asylum, 28 Brock Street, Bath, Avon BA1 2LN. Or: *Zeewolf* Returns, Empire Software, 677 High Road, North Finchley, London N12 0DA. Do NOT send faulty Coverdisks, as they'll just send them straight back! Bad Coverdisks should be returned to: DisCopy Labs Ltd, PO Box 21, Daventry, NN11 5RT. By the time you read this, a fixed demo will be available – but bear with us, eh?

Tim Smith Column

So a hacker has done something so hideous, so dangerous and so nationally threatening that I can't bring myself to fully comprehend the nature of his or her crime. Yes, a hacker has given *The Independent* a front-page lead news story by nicking passwords from walls where they had been top-secretly pinned. Steve Gold and Robert Schifferen (anybody remember the great Prince Philip hack?) would have been proud of them.

Well have I got news for you, get ready tabloids, this is tomorrow's lead...

Hackers with Amigas and 2,400 modems had nothing to do with the BT hack. Neither was the hack due to incompetence, laziness, or a sense of technology at BT that was buried everywhere else when the Model T came off the production line. Nope, the whole thing was an open information endeavour on the part of BT.

Yes that's right, having seen that ordinary people using Amigas can get on-line information from NASA, AT&T, Bell, CERN in Switzerland, the Library of Congress and Andrews Airforce base among others, BT – in a top level meeting in the pub – decided that it would be the first UK company to throw itself open to the freedom of information on the Internet.

Noticing that, while you can E-mail President Clinton, you can't even phone John Major, BT nailed its colours to the mast (after redesigning the colours and the mast at a massive cost) and has stated in an internal memo the following staff guidelines:

Passwords: these should be clearly written and available at all times especially to temporary staff who might not know the names of senior management's children/dogs/favourite football team/player.

Passwords should not contain numbers as these can be confusing.

Terminal access: after sending out the red bills please remember to leave, in plain sight, the numbers (both data and speech) of at least one top secret government establishment on-screen. This is essential to smooth billing and freedom of information.

Unauthorised personnel: unless otherwise unauthorised by the unauthorised personnel authorisation officer, all personnel are authorised.

Confidential telephone numbers: we cannot reinforce the fact that phone numbers for Mr and Mrs Major, Messrs Clarke, Portillo, Lilley, Hurd and Edmonds are not to be left lying around where they might be left out of the next issue of the *Yellow Pages*. The same applies to their E-mail addresses. It is essential that the general public have access to these people, after all, we are at the cutting edge.

Finally, remember, it's good to talk.

Okay, so this little bit of humour might seem unrelated to the Amiga and its myriad uses, but think again. Armed with a £399 machine, a £150 modem, TCP-compatible software and a phone line, you really can garner information from all over the world.

Hence the recent furore kicked up by BT's utter incompetence at keeping things secret. The question that nobody seems to have asked however, is why is this information secret in the first place?

Hacker paranoia makes a good cheap story based on a 'digital underground'. But the majority of the people using the Net – a huge chunk of those are Amiga users – can be trusted, don't want to overthrow nations, and are now used to accessing sensitive areas in other major Western powers except this one. Hey, is it good to talk.

Tim Smith can be contacted on tsmithhb@cix.compulink.co.uk and timbo@gashead.demon.co.uk

The opinions expressed in The Tim Smith Column are not necessarily those of *Amiga Format*

New Aiwa CD-ROM

Leading hi-fi manufacturer Aiwa have taken the first tentative steps into the computer scene with the launch of a new external SCSI CD-ROM drive. Priced at £249.99+VAT, the new ACD-300 has been designed to appeal to the home crossover market – people who want to use the drive for CD-ROM applications but also want to use it as a conventional audio CD player too.

The ACD-300 offers double-speed operation and full multisession support (making it fully PhotoCD-compatible) and it can be connected to any Amiga equipped with a SCSI interface and the appropriate driver software. Aiwa can be contacted on 0181 897 7000.

Above: The jukebox CD-ROM drive from Nakamichi.
Left: The ACD-300 external SCSI CD-ROM drive.

Hot on its heels is a new 'jukebox' CD-ROM drive from Nakamichi. Retailing for £299+VAT, the seven-CD drive uses a 'musicbank' mechanism which allows up to seven CD-ROM discs to be loaded into the CD-ROM drive at any time. Give Nakimichi a call on 01932 562000.

Squirrel SCSI2

The A1200 is a phenomenally popular computer, but one which has so far lacked a decent SCSI interface. This is set to change with the release, from HiSoft, of the Squirrel SCSI2 interface.

The unit, which plugs into the PCMCIA slot on the A1200 (or the A600), will enable the connection of up to seven SCSI or SCSI2 devices, ranging from hard-drives to CD-ROMs, SyQuests and tapestreamers.

The Squirrel will be bundled with a whole host of SCSI utilities for playing audio CDs, sampling CDs direct to hard disk and even allows compatibility with the CD[32], so that many CD[32] games such as *Diggers*, *Liberation* and *Pinball Fantasies* can be run when coupled to a suitable CD mechanism.

Previously, the PCMCIA slot has been considered too slow for use as a SCSI interface, but the Squirrel can apparently achieve speeds of up to 1.2Mb/sec on a standard A1200 and in excess of 3Mb/sec on a 68030 accelerated machine.

The Squirrel will be supported by a range of peripherals from HiSoft, including double-speed and quad-speed CD-ROM drives and SyQuest drives as part of the Squirrel Storage Systems range.

The interface was the subject of a competition, in the form of an advertisement which appeared in a recent edition of *Amiga Format*. The clues were: "the Squirrel Can Suss It" (SCSI) and "no idea" (No IDE). If you guessed the correct solution, you may win a Squirrel SCSI interface and a Squirrel Storage Systems quad-speed CD-ROM drive. The winner will be notified shortly, and if you got the right answer, you are in with a good chance.

The Squirrel will be released at the amazingly low price of £69.95. For further details contact HiSoft on 01525 718181.
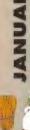
The electronic age

All this E-mail is wonderful stuff, and we are very happy to receive your messages in this way, because let's face it, it's much easier and often cheaper for everyone. However, rather like the ordinary mail, it is very important that you address E-mails to us properly.

The correct E-mail address for *Amiga Format* is amformat@futurenet.co.uk. This is not it though. In the subject line of your message, you MUST include one of the following key words:
Workbench – for technical questions.
Mailbag – for letters to the editor.

Games – for Helping Hand and GameBusters.
Competition (xxx) – for a compo entry, where xxx is the name of the competition
Queries – for problems related to subs and mail order.

If you do not address your mail in this way, there is a fair to middling chance that it will get lost and/or never read at all. If you do address your mail properly, you will get an automated reply letting you know we have recieved it. Usually E-mail is not answered personally, but through the pages of the magazine.

Flight of fantasy?

No...with a Blizzard your Amiga will fly!

If you've ever sat and waited for your Amiga to catch up, you'll know that an extra boost of power would be just the ticket.

But, the only problem is the cost... isn't it?

Well not any more. When you compare our cost per MIP with other boards you'll be surprised at just how little you'll have to pay to enhance the performance of your Amiga computer.
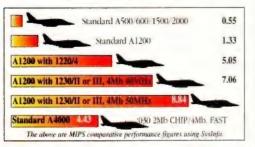
Then, the sky's the limit!

BLIZZARD 1220/4, 4Mb TURBO

The BLIZZARD 1220/4 TURBO MEMORY BOARD is the successor to the 1200/4 award winning unit. This exciting second generation product surpasses the performance of even *that* successful expansion module. Of course 1220/4s incorporate everything that a good memory expansion should, such as a Real Time Clock, further RAM expandability, optional FPU etc. as well as offering a Clock Speed Doubling Circuit which runs the 32 Bit FAST RAM at an amazing 28MHz. Not only does this latest model give Amiga A1200 owners all this, but the selling price has broken the sound barrier too!

1220/4 Turbo   £229.95
4Mb 32-Bit Fast RAM 28MHz 68020 CPU

Add-4 Board (extra 4Mb for 1220/4)   £169.95
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Motorola FPU   £Call
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The Blizzard Performance Advantage...

Just look below to see how well your Amiga really could fly!

Standard A500/600/1500/2000	0.55
Standard A1200	1.33
A1200 with 1220/4	5.05
A1200 with 1230/II or III, 4Mb 40MHz	7.06
A1200 with 1230/II or III, 4Mb 50MHz	8.84
Standard A4000	4.43

030 2Mb CHIP/4Mb. FAST

The above are MIPS comparative performance figures using SysInfo.

Blizzard products are distributed by...

gordon harwood computers limited
the Uk's favourite Amiga dealer!

BLIZZARD 1230 TURBO ACCELERATOR RANGE including the NEW... 1230-III

High performance 68030 accelerators for Amiga A1200 computers. With its two SIMM sockets and two FPU sockets, the 1230-II has a slightly higher spec. than the new economically priced 1230-III which has just one SIMM socket and one PGA type FPU socket. Both offer either 68EC030 40 MHz, or high end 68030 50MHz (which incorporate MMU - Memory Management Units) versions. The new 1230-III brings the same power to the Amiga A1200 as the acclaimed 1230-II, but at a price that's bound to take off!

1230-III Turbo 0Mb, 40MHz 68EC030	£189.95	**Motorola FPU** 68882 PLCC 25MHz (1230-II)	£Call
1230-III Turbo 0Mb, 50MHz 68030 & MMU	£229.95	**Motorola FPU** 68882 PLCC 33MHz (1230-II)	£Call
1230-II Turbo 0Mb, 40MHz 68EC030	£229.95	**Motorola FPU** 68882 PGA 25MHz (1230-II/III)	£Call
1230-II Turbo 0Mb, 50MHz 68030 & MMU	£299.95	**Motorola FPU** 68882 PGA 33MHz (1230-II/III)	£Call
SCSI-II Module for 1230-III	£TBA	**Motorola FPU** 68882 PGA 50MHz (1230-II/III)	£Call
SCSI-II Module for 1230-II	£89.95	**4Mb SIMM RAM Expansion** 32-Bit, 72 pin	£129.95

FASTLANE Z3 SCSI Controller

Lightning FAST DMA SCSI-II interface available now for all Amiga A4000 owners. The only IDE answer with expandability up to 64Mb. of 32Bit Fast RAM. Does not require 'Buster Chip' upgrade. Use with hard drives, CD Rom etc. **PHONE US!**

BLIZZARD 4030 BOARD

Great 68030 accelerator for your A4000. Available in either 40MHz or 50MHz versions. Completely replace the A4000 CPU. Up to 28Mb. RAM expansion, built-in MMU with FPU option. Gives approx. 50% overall performance increase. **PHONE US!**

NEW... CYBERSTORM 040/060

Modular accelerator for the 4000. 68040/40 MHz CPU - approx. 4 times the performance of standard A4000/040 (82 Mips @ 50MHz). Expandable to use 68060/50/60 and 66 MHz chips due soon giving up to 10 x performance gain over standard **PHONE US!**

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The long-running Commodore Saga continues...

And so it goes on. At the time of writing, Commodore International Ltd has now been in a state of receivership for exactly seven months.

But, thankfully for all of us, the takeover now looks to have boiled down to a two-horse race between the Commodore UK management buy-out team and Creative Equipment International (CEI), who are the major distributor of Commodore products in the US.

Since the announcement of the MBO, David Pleasance and co have continually claimed to be in pole position with the receiver. However, claims by CEI have suggested that it may not be as clear cut as that.

In a recent conversation, Alex Amor, president of CEI, stated that they were so optimistic of winning the battle for the Amiga, that their production partner was already tooling up ready to begin production of A1200s, A4000s and CD^{32}s, saving them 35-40 days once the relevant documents had been signed.

A few weeks ago industry paper *Computer Trade Weekly* reported that CEI had made a firm bid for the Amiga, and that the company claims to have reached a "tentative agreement" with the receiver to purchase Commodore's assets.

CEI are said to have made a cash bid, including a non-refundable deposit in the order of $1 million which guarantees Commodore's creditors against any reneging on the proposed buy-out. Assuming this to be the case, the whole proceedings will now go to a court hearing where Commodore's creditors will decide which bid to accept.

However, this claim has been denounced by David Pleasance as "horseshit". "We are in pole position," he continued. "The receiver has been in touch with me to let me know that nothing has been agreed."

Now we're in the position where Amor suggests that CEI's deal should be closed by the beginning of December, while the MBO team expect to announce their successful take-over of Commodore before Christmas. So will the real owners of the Amiga please stand up?

PC EMULATION SENSATION

Amiga owners wanting to run the wide range of serious applications available for the PC can experience the delights of MS-DOS and *Windows* thanks to Meridian Software's new *PC Task 3.0*. Retailing for £79.95, *PC Task 3.0* is a software-based PC emulator which supports the 8086 and 80286 processors, up to 16Mb RAM and a wide range of PC screen modes, including VGA and SVGA with up to 256 colours on screen when run on an AGA machine. Meridian are on 0181 543 3500.

WIZARD GET ON LINE

There's never been a better time to ride the information superhighway thanks to Wizard Developments' (01322 272908) new range of low-cost X-Link modems. Available in either 14,400 baud V.32bis format (£139.99) or high speed 28,800 baud V.Fast format (£249.95), both modems provide full support for Class 1 and 2 plus group 3 fax capabilities. And both modems are fully BT approved.

The Sportster 28,800 baud modem from US Robotics: faster than the rest?

US Robotics hope to capture a slice of the V.Fast modem market too with the launch of their new Sportster 28,800 modem. Retailing for £299, the modem is being pitched at the serious Internet surfer who wants to go faster than the rest. US Robotics can be contacted on 01753 811180.

PHOENIX NO MORE

If you've been tempted to order something from Computer World (formerly trading as Phoenix Computer Supplies) then don't because they've gone into liquidation. If you have placed an Order through *AF* with Computer World that has not been honoured, contact Poppy Forer on 01225 442244.

WEIRD CDS

Last month we quoted Almathera Systems as the supplier of the CD-ROM title *Multimedia Toolkit* when in fact it should have been credited to Weird Science who can be contacted on 0116 234 0682. Other titles available from Weird Science include *Sounds Terrific*, the *AMOS CD* and their equally brilliant font and clip art collections.

Stars in their eyes

Prolific printer people Star Electronics (01494 471111) have unleashed three new low cost dot matrix printers on to the market. The cheapest, the 9-pin LC90, retails for £129.

All three printers come with automatic sheet feeders, low noise technology and – to help you get up and running – a dedicated Amiga printer drivers' disk which can be obtained from Star at no extra cost. The range starts with the LC90, a 9-pin mono dot matrix printer which retails for £129. If you need something a little more advanced, the next printer in the range is the LC-240, a 24-pin mono printer which costs £20 more. Finally, there's the LC-240C, a colour version of the LC-240 which, once again, costs £20 more than its little brother, the LC-240.

A FEW WORDS ABOUT SHOWER AND POPPER

AMIGA POWER
Don't buy a turkey this Christmas...

Here at *Amiga Power*, we have selflessly sacrificed our own Christmas to ensure that yours is as happy as possible. We have reviewed games until the joysticks fell from our shaking hands. We have lain awake for night after night, deliberating over which ones we should recommend to you. We have typed till our fingers bled in producing our enormous *Christmas Present Guide*. We have ALMOST KILLED OURSELVES to bring you three fantastic coverdisks featuring *Cannon Fodder 2, Powerdrive, Overlord, Super Stardust* and *Gunfighters*. You can, at the very least, in a token display of gratitude, pay £3.95 for the magazine we have created for you. To do any less would be barbaric.

Jonathan Davies, editor, Amiga Popper

AMIGA SHOPPER
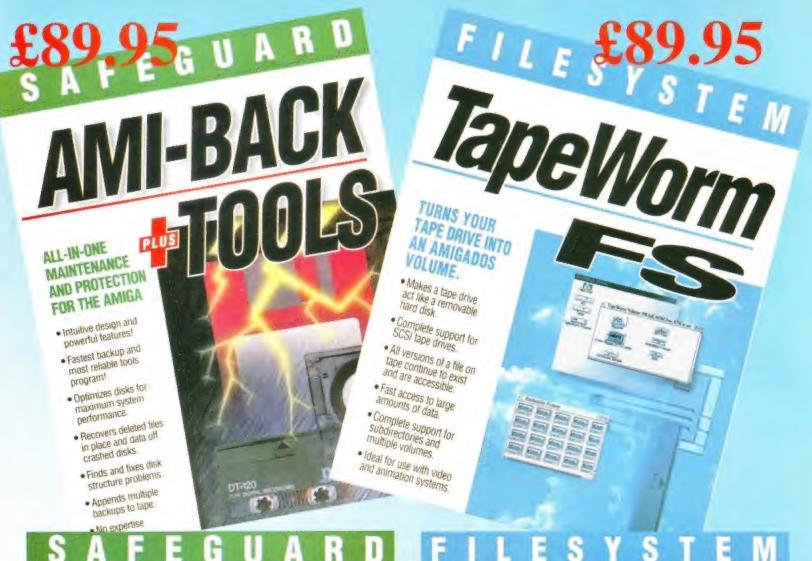**Spaced out in 3D**

Space may be the final frontier, but how will you get there if you can't build a spaceship? Cunningly tucked behind this month's cover you'll find an article by Mojo of Foundation Imaging, the people behind the stunning graphics of *Babylon 5*. Let Mojo show you how to create your own intergalactic battle fleet!

You'll also find our supertest of Amiga music programs. Plus we have the usual collection of revealing reviews, titillating tutorials and Amiga Answers to stop those tears of frustration. Can you live with yourself if you miss it?

Richard Baguley, editor, Amiga Shower

Making a game of it

All Amiga gamers have a great game inside them somewhere. We tell you how to squeeze it out with the help of our AMOS Professional Coverdisk and how to get your game published. Plus win up to £1,000 in our fantastic games programming competition!

People who enjoy playing games think they know what makes a great game. And now with our tremendous *AMOS Professional* Coverdisk, you can put your ideas into practice. But after slaving over a hot keyboard perfecting your program, you'll

The original Alien Breed was a Team 17 success. But how will Andy Davidson's Worms fare?

be itching to distribute it so others can see the fruits of your labour and perhaps earn yourself a few bob at the same time. But how do you go about selling it? Should you send it to a software house and hope they'll stick it on the shelves of hundreds of stores nationwide or do you go to the hassle of selling it yourself?

Maybe money isn't your aim and you would just rather send it to a PD library and enable it to gain vast exposure. Here's our advice.

SELLING TO A SOFTWARE HOUSE

Software houses receive hundreds of games a year, some good, some bad, most of them indifferent and a few that go on to be major commercial releases. But all of the software houses we talked to said they look at every game they receive, so if your game is good enough there's every chance it could be picked up.

Sending your game to a software house is easy – just stick it in an envelope and post it, but follow a few obvious pointers:

CONTRACTS AND PAYMENT

If your game is picked up by a software house you're going to need to sort out a contract and terms of payment. The best way to negotiate a contract is to get an expert to do it for you. There are many lawyers who specialise in sorting out the terms and conditions of contracts, and in the long run you'll save money by paying a reputable lawyer to handle your affairs. Contact your local law centre for the name of a specialist contract lawyer.

Always check the small print and conditions of your contract, even with the best legal advice you may find yourself being asked to sign a restrictive contract – remember George Michael and Sony? The methods of payment can vary from contract to

contract, but you are likely to be offered either an advance plus royalties, or a one-off payment.

Royalties are a percentage of the profits from the game, and sometimes only start to be paid once the initial payment has been covered from the game's sales. There is a worst case scenario here where the game doesn't sell enough copies to cover the advance payment as you could end up having to pay back the advance.

The advantages of a one-off payment are that it's a simple method of payment with no strings attached. The disadvantage is that if the game sells 100,000 copies you don't see any of the money other than your initial payment.

SELLING IT YOURSELF

If you've got complete confidence in your game you could always sell it yourself. In theory this is simple enough until you realise that it means you've got to produce packaging, manuals and advertising, sort out distribution, talk to stockists, work out your development costs and profit margins and convince magazines such as *Amiga Format* that your one-man outfit should be taken as seriously, and given the same publicity as Virgin, Ocean, Team 17 and the other big boys.

Oh, and you'll also have to deal with any after-sales problems and customer complaints. And playtesting.

But being in full control of your software has its advantages, one of which is dictating its price. But be realistic. If your release isn't as good as a commercial equivalent then don't price it above the rival software. You need to strike a balance

between the price and the worthiness of the software. If you get the price right customers will be more happy with their purchase and maybe they'll be more likely to buy more of your titles as and when you write them.

To make a really good impression, aim to get your manual professionally designed and printed, but if this is not financially viable then just try and get the instructions as clear and concise as possible so a complete beginner can grasp the finer details of the gameplay.

Getting your game reviewed in *AF* is essential. When you have a demo version ready, call games editor Stephen Bradley and arrange a time to bring the demo down to show him. Take note of his comments and keep in contact with him. Find out when the *AF* deadlines are and bring your finished game down at the beginning of an issue when Steve will have more time to talk to you and look at the game.

Initially you can advertise your game in *Amiga Format*'s Market Place pages where prices start at £60+VAT for each entry. Then when the sales come rolling in, think about placing a larger advertisement. When you do get an order try to be absolutely sure that you send your software to the purchaser as soon as you cash in the cheque. Not only does this cover you from any evil doings (people who pay by cheque, receive the goods and then promptly cancel the cheque, leaving you with nothing) it also benefits the customer since nobody likes being kept waiting for things to arrive in the post.

You should also contact mail order companies to see if they would like to sell your game. Although it means you will have to take a reduction in profits, it also means that you will probably sell more copies. And if you can get a few local high street shops interested then you will be on to a nice little earner.

phone up the software house first to get the name of the person you should send the game to, mark the envelope clearly for their attention and arrange a time you can call them to make sure they have received and looked at your efforts.

Andy Davidson went one step further and took his game to the ECTS to show it to Team 17 – now it's destined to be a major commercial release.

Former *AF* editor, Team 17 Development Co-ordinator Marcus Dyson takes up

the story: "Very, very rarely someone will walk in with a peach and you know that on that day God is smiling on you. That might happen once or twice a year. It's already happened this year. Andy came to us at ECTS with a game and that will be published by Team 17.

"It could actually be published in the form that it was brought to us if we wanted to make a quick buck for Christmas, but we came up with a few ideas which will be added in. The game's called *Worms* and it

will be released at Easter. It's the best game I've seen for ages – sort of *Cannon Fodder* meets *Lemmings*."
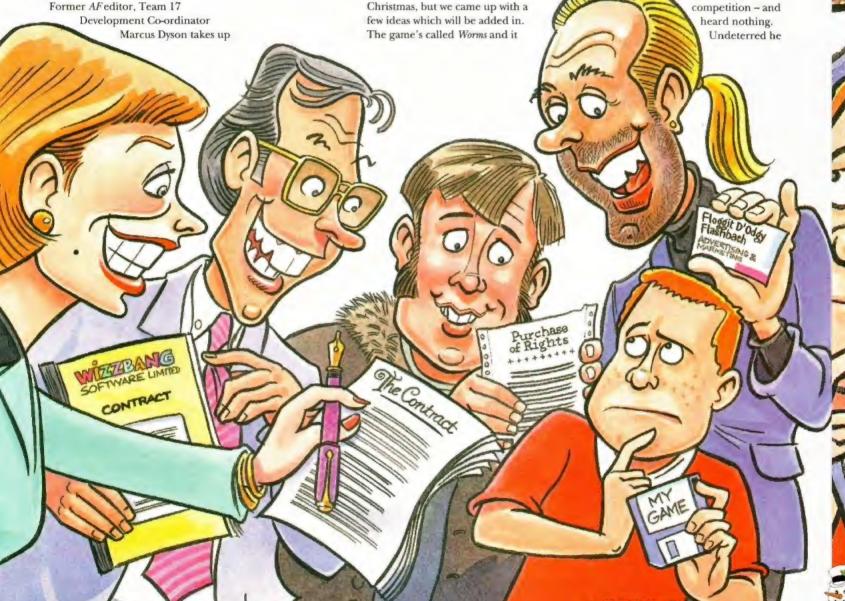
Andy, a 21-year-old Amiga enthusiast who works in a computer shop, came up with the idea for *Worms* almost four years ago, but only recently started trying to get it published. He entered it for the *AF Blitz Basic* game programming competition – and heard nothing. Undeterred he

Continued overleaf ➜

SENDING IT TO A PD LIBRARY

To get your game on to the PD scene and allow it to be copied by anybody at all, all you have to do is send a few copies of your software to as many PD libraries as you want. They'll take a look at it and decide what to do with it.

If it's not up to scratch then it may not get as wide an exposure as a good piece of software. However if it's a good game then it will probably end up on a disk with other programs, whereas a larger piece of software will be sold on an entire disk.

If you take a look at a PD catalogue, you'll see the diversity of software that is on offer, from demos to slideshows to games to serious applications. It is an ideal testing ground for new programmers who want to make a name for themselves before embarking on a more ambitious project, maybe with a software house. And as an added bonus, most libraries send you a free disk of PD stuff for your trouble.

But if you find the no-money aspect a bit off-putting then why not consider releasing the game as Shareware? You will still have the benefits of PD

Pub Darts is hardly a visual feat, but it's a popular PD game and a good example of what you can do with *AMOS Professional* and a bit of imagination.

software but with the bonus of cash if people decide they like it and want the upgrade.

The PD is packed with all sorts of games. *Relics Of Deldroneye* is a particularly good adventure.

THE PD OPTION

If your game is not picked up by one of the mainstream software houses you could always consider distributing it through one of the many Public Domain libraries. If it's picked up you're not going to make a huge amount of money out of the game (probably none), but you could make a name for yourself on the thriving Amiga PD scene, and it's a way of gauging how popular your work is.

And bear in mind that many of the Team 17 programmers started in PD, and that Team 17 itself grew from the 17Bit PD library. But once again the competition in the PD sector is very tough. Tony Phan of Five Star PD gets sent 20-30 games a week, only about 20 per cent of which make it into the library.

"What we look out for is a nice, simple interface, graphics that catch the eye and a program that is stable," says Tony

" Also, anything with any sort of originality is welcome. I reckon that 99 per cent of the stuff we see is a copy of something else. The only way to make money out of PD, if you think your game is good enough, is to send in five levels of a 20 level game and then, when a player reaches the end of level five, give them the option of sending some money to receive the rest of the game."

Andy Davidson: his persistence paid off and now Team 17 have taken up his *Worms* game.

← then sent a copy to Acid Software in New Zealand – and heard nothing. "I was getting a bit fed up, so I decided to take it to the ECTS to show Team 17 as a last hope. They stuck it on for five minutes and said: 'do you want to publish it?' I almost fell over with surprise."

Team 17 get sent two or three games a week from hopeful programmers but most of them just are either too derivative of other games or are simply not good enough to be published commercially. It's the same story at Ocean where Simon Alty is sent five or six games a week.

"We look at all of them and respond to all of them. I've got to say that 90 per cent of the time the reply is along the lines of: thanks for your effort, we appreciate your

enthusiasm but unfortunately... Some of the things we receive are decidedly odd. Just recently we got a full storyboard for *StreetFighter II* but with plants rather than characters. They had things like special root kicks and sunflowers with death sprays. Very bizarre.

"In all honesty, none of the games or game ideas we get stand much of a chance of getting made because we are in constant contact with half a dozen or so of the best professional development groups in the world and if one individual could come up with a better game than those guys then something would be seriously wrong."

But don't give up, because even if your game doesn't make it, the software house might still be interested in you.

"What we do try to do is watch out for talent. We might spot someone who has a very original mind or a talent for art or coding," said Simon.

"I suppose the best example of that is Martin Kenwright, someone who came into our office with a demo of a plane rotating on a screen. Five years later he's got his own development company, DID, he's signed up to Ocean for five years and he's a paper millionaire.

"That's why it's always worth us looking at every single thing we get, because one of them might contain Willy Wonka's golden ticket."

Continued overleaf →

← CONSOLATION PRIZE

By now you've probably realised that getting your game published commercially or distributed by a PD library is not easy. But if it's any consolation many programmers have gone on to great things despite suffering initial set-backs.

Fergus McGovern of the Probe software house has a prime example: "We get absolutely loads of work sent in to us and we do consider everything. Having said that, I have to admit that we did pass up on The Beatles not so long ago.

"A guy came to us with a game he'd written, *Merv The Merciless*. We took it but we gave it away free on the cover of a magazine and he sort of slipped through our fingers. He then went on to write *Chuck Rock*, *Chuck Rock 2* and *Thunderstrike* for the Mega CD.

"It's very rare that we receive whole games. We usually get demos or ideas and a lot of artwork. A lot of it is quite poor, some of it is absolute crap, but now and again something will stand out and it will lead to something.

"It's absolutely amazing the amount of talent that is out there and the ways that you can discover it. The barman in my local pub told me that he could draw a few years ago and to prove it he drew me something on the back of a beer mat. It was so good that I gave him a job and he's already done work on *Terminator*, *Lemmings* and *The Lion King*.

"Probably less than 10 per cent of what we receive ever leads to anything, but it's always worth sending stuff in because you may be lucky. Seven of our current staff got their jobs that way."

Although they've got one of the most popular games of the year in *Mortal Kombat II*, Probe Software always want to hear from budding programmers.

To learn the basics of programming with *AMOS Professional*, load up your Coverdisk and turn to the instructions on page 10.

DO IT WITH AMOS

Unlike other less scrupulous magazines, we're not going to attempt to pull the wool over your eyes by pretending that *AMOS Professional* is capable of producing games that will rival the professionals. Fact is, *AMOS Professional* doesn't provide the sort of raw speed that *Assembly* language – the choice of 99 per cent of professional games programmers – delivers.

Before you bin your copy of *AMOS Professional*, however, it's worth bearing in mind that even the likes of *Elite* and *Frontier* programmer David Braben and Jez San (of *Starglider* and *Birds Of Prey* fame and now the head of Argonaut Software) had to start somewhere – and, more often than not, *BASIC* was the language that they used to hone their latent games programming skills.

In many ways, you have a major advantage over the professionals as – unlike your average *BASIC* – *AMOS Professional* has been specifically written for games programming and is therefore the perfect medium to develop programming techniques that form the foundations of games programming. You can use *AMOS Professional* to develop sprite routines, scrolling techniques and so on, safe in the knowledge that the techniques that you learn will serve you well in the future.

The great thing about games programming in *AMOS Professional* is that it teaches you to develop routines to achieve specific results – you might, for example, want to write a parallax scrolling routine. If you eventually move on to

Assembler, you can take the routines you developed in *AMOS Professional* and transfer them to *Assembly* code fairly easily – even if the language is different, the techniques remain the same.

That's not to say that *AMOS Professional* can't be used to produce simple games – just look in the PD libraries and you'll find a veritable treasure trove of quality games developed entirely in *AMOS Professional*. The key to writing games in *AMOS Pro* is to optimise your code as much as possible – that is, to make it run as fast as possible. Most arcade games need to complete a single cycle (everything is updated) in one single screen refresh (frame) which equates to approximately 1/50th of a second. What this essentially means is that your code has to run very fast – if it runs any slower than a single frame, your game will appear jerky.

Even if your game does run in 1/50th of a second, it's well worth considering the *AMOS Professional Compiler*, a program that translates *AMOS* programs into pure machine code. Although compiled *AMOS Pro* programs still aren't as fast as *Assembly* code, the extra spurt of speed that you'll gain from compiling your programs allows you to add extra features to your games – extra baddies, more animations or whatever – all of which adds that little bit of extra polish to a game.

Although the *AMOS Professional Compiler* works with our Coverdisk version of *AMOS Professional*, it's not possible to run the *AMOS Pro* Shell from within *AMOS Professional*. Instead, you'll need to compile your programs separately from the *AMOS Professional* Editor.

Turn to the Coverdisk instructions on page 10 to find out how to get started with your *AMOS Professional* Coverdisk and look out for the first in our in-depth series of tutorials, starting next issue. **⚙**

Continued overleaf ➡

THE id SUCCESS STORY

The potential of the Public Domain as a way of distributing software and earning money was ably demonstrated by id Software, with their PC titles *Wolfenstein 3D* and *Doom*.

By releasing the first couple of levels of each game as shareware – over the Internet, primarily – they get people playing the game. After completing three levels (by which time, they hope, you're hooked), the game prompts you to send some cash to a specific address, or quotes a number where you can leave your credit card number. The remaining levels of the game are then dispatched forthwith.

This system has proven massively successful for id Software, with thousands of copies of both

games having been downloaded, copied, passed around and installed on PCs around the world. Jay Wilbur of id Software admitted to believing *Doom* has been played on over a million PCs, and that it has been more successful financially than if they'd simply packaged up the game and distributed it through shops.

Of course, *Wolfenstein 3D* and *Doom* have very good reasons for being played as much as they have: they're both bloody good games. Each in turn has set new standards for the 3D shoot-em-up, both technically and with regard to gameplay. They also boast multi-player options which are massively popular – especially in offices where many PCs are on the same network.

So the lesson here is make it good, make it playable and make it cheap.

Wolfenstein 3D and Doom were PD releases and made more money than if they'd gone through the shops.

The great Amiga Format AMOS Write A Game competition

All the pictures shown on this page are games that have been written in AMOS Pro. Above: *Ambassador Pro.*

Show us what you can do with our wonderful *AMOS Professional* Coverdisk and you could win up to £1,000!

Starbase 13 is a *Monkey Island*-style graphic adventure.

Santa And Rudolph Do Christmas: For more about this game turn to page 149.

Blackdawn II, on the other hand, is a *Dungeon Master*-style hack 'n' slash romp.

Our Coverdisk this month contains one of the most powerful and easy-to-use programming utilities ever developed. To encourage you to get the most from it, *Amiga Format* are sponsoring a Write A Game competition which will give all you aspiring programmers the best possible start to your career. Simply follow the rules set out in the box below and you could be on your way to fame and fortune.

The type of game you decide to write is entirely up to you, but please, no fruit machine sims, and if you decide to be influenced by an existing title, ensure your game is at least as good as the source of your inspiration. The more original you are, the more chance you have of winning.

Just think how impressive your programming CV will look when you include 'Won the *Amiga Format* Write A Game competition in 1995' at the start of it. And if you do go on to write the next *Cannon Fodder* or *Sensible World Of Soccer*, remember your friends at *Amiga Format* who set you on the road to your own private island...

RULES

1) Over the next few months, write a game using our *AMOS* Coverdisk. Make it as easy to run as possible.
2) Send your creation on a disk to us for evaluation (*AMOS* Competition, *Amiga Format*, 30 Monmouth Street, Bath Avon BA1 2BW).
3) Please don't forget to include your name and address.
4) The authors of the best submissions will be offered a cash sum for them to be included either on a forthcoming Coverdisk or in an *AF* winners compilation.
5) Closing date for entries is May 1, 1995 so you've got plenty of time to get to grips with the language. We will

be including *AMOS* tutorials in *Amiga Format* for the next five months to help you.
6) We regret that no entries can be returned so, for goodness sake, make a back-up of your masterpiece.
7) Make notes as you go along. If you are successful, we may ask you to write 500 words or so, for inclusion in the magazine, explaining how you wrote your creation.
8) Don't hassle us! We regret that we will be unable to enter into any correspondence, either by telephone or in writing, concerning this competition. The winners will hear from us in due course.

41
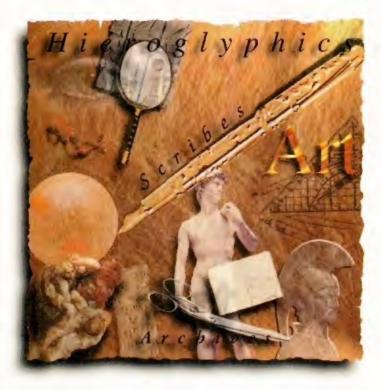
SoftWood Software
will go down in history,
the best there's been... for ages.

The way we all communicate today has evolved through centuries of development and change. Prehistoric man set the ball rolling when he used cave pictures as a means of describing his hunting conquests. Probably the most famous of all 'picture writing' techniques was that used by the Egyptians. Known as Hieroglyphics, which means 'sacred carved inscription', this ancient form of information technology quickly spread to all parts of the Mediterranean region. Gradually pictures were rationalised and both numbers and letters were eventually formed.

The Greeks were the first to use these letters in a way that is familiar to us all, and they in turn passed this knowledge on to the Romans. It was then that an alphabet was formed using only capital letters; the basis of most of today's languages. Inscriptions in stone, often filled with lead or bronze, eventually gave way to clay tablets, papyrus and ultimately parchment (treated animal skins). By AD 100 parchment and papyrus books were being created. Another 600 years passed before books began using capitals for headings and small letters, known as 'half unicals', for the main body of text. Although still made by hand, pages were easier to produce and became far more legible in the process. It was the mid 15th century before sets of small interchangeable metal letters were arranged, inked and pressed against paper to form an impression. The start of a printing process that was a less labour intensive way of spreading the written word was here. It was so successful,

that with continual refinements, it remained the industry standard until the 1950's. Since then, the process of off-set litho printing has replaced 'hot metal type'.

The biggest leap in the presentation of languages has probably been achieved in the last ten years. With the adoption of computer generated text as a new standard, complicated layouts can now be designed and printed at the touch of a few keys.

And it doesn't stop there. Archiving and record keeping works hand in hand with these new methods of processing text and allows far faster methods of data retrieval than ever before. This latest technology has revolutionised the world of print, and has opened the door to an explosion of communication possibilities.

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bringing the revolution into your home... and onto your Amiga.

JANUARY 1995

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SCREEN *PLAY*

Two games that deserve a good kicking

SENSIBLE WORLD OF SOCCER

RISE OF THE ROBOTS: Don't believe the hype. One of the year's most eagerly-awaited games is out for Christmas. And it's a turkey.

CAPE COAST 1 - 1 HEARTS OF OAK

AMIGA FORMAT

MERRY CRIMBO

Festive greetings to one and all. It's been a rocking good year for Amiga games, despite the troubled times at Commodore. *Mortal Kombat II, Cannon Fodder 2*, the quirky *Empire Soccer, Pinball Illusions, Zeewolf, Putty Squad, Beneath A Steel Sky*. The list is endless. And which machine gets top billing when it comes to *Sensible World Of Soccer*? The Amiga.

The Amiga is still the best all-rounder. It remains the most popular, affordable platform for DTP, paint programs and the like and still out sells all other formats when it comes to games. But what of 1995? Many software houses, initially reticent about the coming year are wising up. They know the Amiga has the most loyal user base. So expect to see a whole load of Amiga games in the next 12 months.

The battle of the football games is upon us – *Sensible World Of Soccer* and the alleged pretender to the crown, *Football Glory*. The verdict? Check out pages 48 and 72. *Desert Strike* successor *Jungle Strike* also gets an airing while the much-vaunted *Rise Of The Robots* finally arrives. Hot air or hot action? Page 70 has the answer. But enough from me. Have a great Christmas and a frolicsome New Year. Regards from all at *AF*.

AMIGA FORMAT'S REVIEW POLICY

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up-to-date as possible, and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

WHAT OUR REVIEW SCORES MEAN

90+%
The crème de la crème of games. Only the very best, most playable and original games are awarded an *AF* Gold – the most highly-prized rating there is.

80-89%
These games are very good, but due to minor flaws are not the finest examples of their genre.

70-79%
Good games which are worth buying, especially if you have a special interest in a certain game type.

60-69%
Average releases with limited gameplay and appeal. Games in this category tend to have significant flaws.

50-59%
Below average games like this are unlikely to impress your mates or your wallet. Try to avoid if you can.

40-49%
Overwhelmingly poor quality games with major flaws and appalling gameplay. They're an embarrassment.

Less than 40%
The absolute pits, the lowest of the low. Don't even consider borrowing 'em.

THREE-PAGE SENSIBLE SPECIAL

SENSIBLE WORLD OF SOCCER p48
Now with a management option and every major league team in the world. Is this the best ever Amiga game? Turn the page to find out.

JUNGLE STRIKE: Fly, shoot and shoot again.

SUBWAR: It's strife on the ocean waves.

REVIEWS

GOLD

After three weeks of playing, living, sleeping and breathing *Sensible World Of Soccer*, Steve Bradley is convinced that it's definitely a game of two halves.

Sensible World Of Soccer

Bodies littered the field of play. Some of the contestants looked rather distracted. Others chased the ball. But football was the winner.

his is the game we've been waiting for. The anticipation was even greater than for the forthcoming Stone Roses album, Christmas, a winning lottery ticket and even the day Keith Chegwin turns up at your house with *The Big Breakfast* in tow. Which, inevitably, he will. Someday.

So what has changed? How could the Sensible team come up with anything finer than the last upgrade which introduced a Man In Black producing red and yellow cards? Well, for starters, there is now a stadium with colour co-ordinated crowds behind each goal. This improves the atmosphere immeasurably, urging you to bulge the onion bag in the full knowledge that the gathered throng packed behind the net are your supporters. Add the press photographers and police, and it's just like watching real football in a real ground with real little men and... ahem. No, you can't smell the hotdogs.

Onion bags

But *Sensible World Of Soccer* (*SWOS* from now on) has a deal more to offer than mere finery. The management option sees to this. Now, instead of just playing leagues,

cups and friendlies, you can have a career managing, or playing for and managing your favourite team. And this career can last for up to 20 seasons, chairman permitting – don't take that job at Aston Villa or Everton. Or Athletico Madrid. The ultimate objective, to be offered the England job. Or perhaps the Brazilian hot seat.
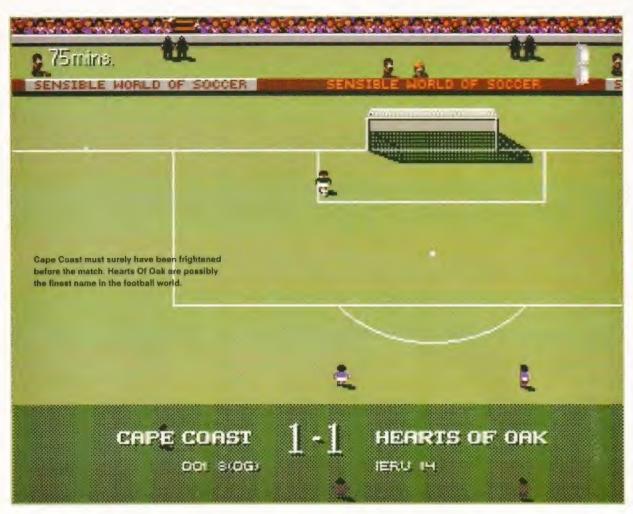
The number of teams you can boss is quite unbelievable – choose any club side IN THE WORLD and chances are it'll be here, whether it be Italy's AC Milan, New Zealand's Central Region outfit, Waterside Karori or Ghanian greats Hearts Of Oak. Staggering. And to cap it all, the

LEEDS UNITED		TOTTENHAM H.
4	GOALS	0
58%	POSSESSION	42%
16	GOAL ATTEMPTS	4
14	ON TARGET	3
1	CORNERS WON	1
3	FOULS CONCEDED	1
1	BOOKINGS	1
0	SENDINGS OFF	0

At the end of each half, you are kindly provided with match statistics. Here is an example we prepared earlier. Leeds scored four more goals than Tottenham.

GHANA PREMIER DIVISION

		PL	W	D	L	F	A	PTS
1	OBUASI GOLDFIELS	3	3	0	0	7	2	6
2	DAWU YOUNGSTERS	3	2	1	0	6	1	5
3	ASANTE KOTOKO	3	2	1	0	3	1	5
4	HEARTS OF OAK	3	1	1	1	2	2	3
5	NEOPLAN STARS	3	1	0	2	3	5	2
6	GREAT OLYMPICS	3	0	2	1	1	3	2
7	CAPE COAST	3	0	1	2	2	5	1
8	DAWAHU STORES UD	3	0	0	3	1	6	0

HEARTS OF OAK   V   DAWU YOUNGSTERS

MANAGE MATCH   VIEW HIGHLIGHTS   RESULT   STATS   EXIT

Can you guide Hearts Of Oak to glory in Ghana's Premier Division? You can play for any team in any league in any country. You may even want to be someone as obscure as AC Milan.

48

75 mins.

SENSIBLE WORLD OF SOCCER   SENSIBLE WORLD OF SOCCER   S

Cape Coast must surely have been frightened before the match. Hearts Of Oak are possibly the finest name in the football world.

CAPE COAST   1 - 1   HEARTS OF OAK

DOI 3(OG)   IERU 14

■ **The keepers have now undergone some severe tweaking. They've really wised up.**

players all have real names (yes, we've checked them all, honest) and values, though some of the figures quoted for some of them are open to debate. So you're looking at more than 1,500 teams and 26,000 players.

The value of each player relates to his ability. Roberto Baggio, the Juventus maestro and top-priced *SWOS* star rolls in at a cool 17 million and he's brilliant. Shooting, passing, dribbling – you name it, he can do it best. And if you've got him in your side, you notice that unlike the normal *Sensible* player, the ball sticks to his feet like glue. Purists may not like this. They've spent a couple of years

honing their dribbling skills to perfection only for some Johnny-come-lately to come along, choose the teams with 10 million pound players and run amok.

Boot bags
But then, if you have mates who never play the game and you want a decent match, you can pit AC Milan against Kilmarnock and the game will be reasonably fair. In effect *SWOS*, in arcade mode, is different to the other versions – the star players see to that.

And what of the goalkeepers? Every experienced *Sensible* player can find the keepers' weaknesses but

they've undergone some quite severe tweaking. No dashing to the edge of the box and blithely ramming the ball into the corner. No rushing diagonally into the area and swerving the ball past the hapless chap. They've wised up. Quick, short-passing movements in the penalty area can unlock the defence, or you might try dribbling past the keeper. The keepers are graded so it's easier to beat the bloke at Wigan Athletic than at Blackburn Rovers. Whatever, it's tougher all round to score goals.

One of the best new features in the management option is the

Continued overleaf ➡

One of the delights of *SWOS* is the ability to strengthen your team. Mr Kanchelskis was perfectly happy to cross the Penines while Mr Ferguson seemed pleased with his two million quid.

The financial side of football plays an important part. If you can't generate cash, you won't be able to strengthen your team. And then the board will give you the boot.

TALKING TACTICS

Tailor your formations to suit the need. The Italian 'keep ball' is excellent and the 's' is a fine manoeuvre.

80 mins.

Avoid bringing down opponents on the edge of the box at all costs. It's not worth losing a man because the goalies are likely to save most of the shots with their new-found brilliance.

Stats screens inform of what's happening around the world. Want to know how the J-League in Japan is shaping up? Easy.

Every team in every country. Phew! How many other footie games have got the Taiwanese league. Or New Zealand's Southern Region?

After Hearts Of Oak, the Dangerous Darkys are the finest-named team. And their best player also sports the best name – Sunday Nambale.

◄ worldwide transfer market. You can check over the players currently available or call up a club and attempt to poach their jewels. The likelihood is you won't have enough money for the great players, or the club will politely inform you that the player is 'not available'.

Magic sponge

Unfortunately this hampers your chances of signing Ryan Giggs for York City, but on the plus side, you can transfer list the players you dislike and with a little luck, bring in superior replacements. Speed for Kanchelskis

anyone? Doh! You can even part-exchange players if the price is beyond your means.

Given the brilliance of the goalkeepers, tactics play a significant part in SWOS. There are 10 pre-set tactical options and you can edit up to six different tactical styles according to how you want to play, or the quality of the opposition you face. The tactics are based on a grid which separates the pitch into 35 areas where the ball can be at a given time and 240 areas where a player can be – this allows you to tailor detailed formations. Not that you can

have your centre forward in one box attacking and three seconds later defending at the other end, but you can get more players to attack and defend in numbers.

The more players you can get into the box, the better, it would seem, the chance of scoring. You can now enjoy the benefits of deep-lying midfielders, overlapping full backs, wingers who cut in when they see the ball at the edge of the box – in fact, you can do almost anything. If you know that an opposing forward is worth 15 million, and therefore pretty 'handy', then you can instruct defenders to close down his space in certain areas of the field.

Magic mushroom

So, is SWOS the perfect all rounder? Is it a game that effectively makes all other arcade and management games redundant? Well, yes and no. It is the finest arcade football game, probably on any platform. Forget the pretenders – this is the ONE. OK, you might still find room in your hearts for Empire Soccer. Fans of the management genre might be put off by the lack of stats but SWOS concentrates on the football side of managing rather than the business areas. No worries about what's going on the advertising hoardings here.

Sensible World Of Soccer is every bit as good as we hoped it would be. As an arcade game, it improves on the previous incarnation, and the management side is enormous fun to play. It's way better than any other football game. Ever. And SWOS is as good an Amiga game as you can buy.

Sensible World Of Soccer	
Publisher:	Renegade 0171-481 9214
Price:	£29.99
Versions:	A500, A600, A1200
System requirements:	1Mb
Release date:	Out now

↑ **AC MILAN:** The very best Amiga game in the history of all things ever. Arcade and management happily married.

↓ **WIGAN ATH:** Erm, I think Dukla Prague have got the wrong coloured socks. No, I was wrong.

Overall rating	95%

50

Last time it was a desert, this time we're waging helicoptery warfare in a jungle. Steve McGill sprays himself with mosquito repellent and gets stuck in...

Jungle Strike

CHOCKS AWAY!

Unlike *Desert Strike*, this time round the main attack chopper is a Comanche.

Skiddy, slippy, slidey hovercraft are fun to ride in and kill things with.

Remember kids when out on the roads, think once, think twice, think bike.

If you think *Jungle Strike* is noisy, then try out the F117A by Schh you know who.

I f *Zeewolf* hadn't been released last month, and *Jungle Strike* wasn't a sequel, it would have found itself with an easier reviewing flight path.

Undoubtedly, *Jungle Strike* is a fine game which continues in the tradition of *Desert Strike*'s (*AF46* 87%) pretty – though not beautiful – graphics, engaging strategies and top boom boom explosions.

The structure of the game remains constant; nine separate campaign areas with several missions to be completed for each campaign. And each mission can be terminated in a different manner, depending on the peccadilloes of the gamer's playing style.

Cannon fodder

For example, as soon as you're confident with the control systems and worked out the damage capabilities of the three weapons, different approaches can be made toward hostile targets. The simplest maxim is: "don't waste missiles on static targets that don't fire back". Use the cannon instead.

Now to major gripe number one. As I said, there are three different weapons systems. To flick between them, you have to hit the space bar.

With *Desert Strike*, you could use a Sega joypad and the Amiga would

To rescue hostages, first blow up the building they are being held in. Kill all the hostiles you see and then rescue the prisoners.

read buttons B and C. The B button acted as Fire and the C button switched between weapons systems.

So, say you were approaching a base camp that had a few soldiers dotted around plus a Sheridan, it would be wise and economical to take out the soldiers with the cannon and the Sheridan with two Hydra and one Hellfire missile.

To do this efficiently, a suckered joystick and a smooth surface are needed. Otherwise it can end up

feeling as if it's a game of *Twister* you're playing. Tut tut. *Jungle Strike* is a game worth buying a CD32 controller or two-button joystick for.

But due to the pressure of time and marketing limitations, the option hasn't been included in *Jungle Strike*. A loss for the gamer and a poor element to the game.

And while we're at it, let's take a look at another fault that breathes longevity into the game for all the wrong reasons – the map screen.

The map screen contains vital information on the chopper's armour level, fuel consumption and weapon use. Apart from, maybe, the weapon usage indicators, fuel and armour should always be on display on the main view screen.

Otherwise, as is the case here, the map screen has to be constantly

The infamous map screen. Where you find out about fuel, arms, armour, location, lives, hostages held, and mission objectives.
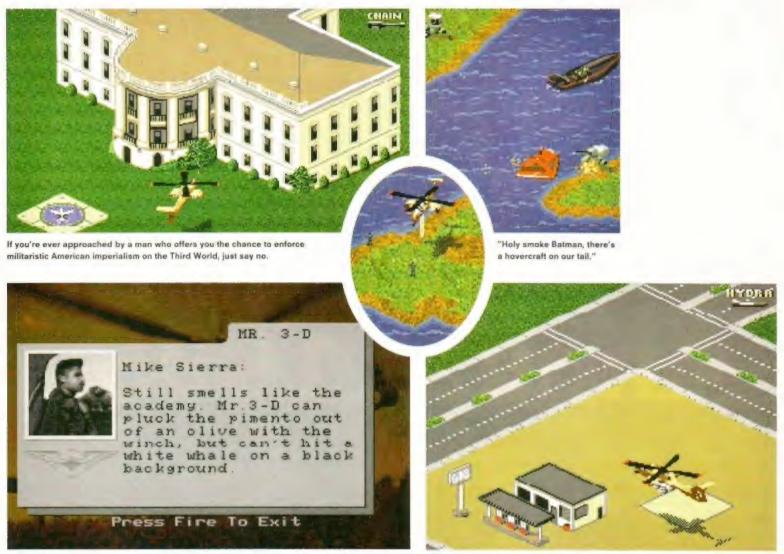
Sometimes the contents of the buildings have to be destroyed before a mission is completed.

If you're ever approached by a man who offers you the chance to enforce militaristic American imperialism on the Third World, just say no.

"Holy smoke Batman, there's a hovercraft on our tail."

MR. 3-D

Mike Sierra:

Still smells like the academy. Mr.3-D can pluck the pimento out of an olive with the winch, but can't hit a white whale on a black background.

Press Fire To Exit

The quality of your wingman affects mission performance. In later campaigns, better wingmen can be rescued from POW camps.

Wait until you pick up some fuel, hear the acceptance click and still crash. Aaargh!

flicked to. A mechanism that's very irritating. When the chopper's engaged in battle, the last thing that the pilot wants to do is flick to a static screen. It kills the continuity and constantly reminds you that you're playing a computer game rather than righting the wrongs of the world. Tsk tsk.

In the picture

Zeewolf unobtrusively displays the armour and fuel level indicators on the right and left of the screen respectively. Checking them out is just a matter of moving your eye to the relevant part of the screen. And when it's necessary to flick to the map screen with *Zeewolf*, the top left corner of the new screen displays the game in miniature so that it can still be played while the relevant map

orientation is obtained. Continuity and suspension of disbelief is maintained throughout.

Don't get me wrong, *Jungle Strike* is a cracking game. In many ways it's better than *Zeewolf*. But, with a little more foresight and planning, it could have been a lot more fun.

Running short of fuel is always a problem due to the fuel indicator

residing on the map screen. By the time you're informed that you are short of fuel it's often much too late to do anything about it. An infuriating waste of life.

The bottom line though, is that *Jungle Strike* is an incredibly good game. If the user interface had been friendlier, it would have earned a *Format* Gold.

■ *Jungle Strike* is a fine game which continues in the tradition of *Desert Strike*.

Little pig, little pig, let me come in or I'll huff and I'll puff and I'll blow your house in.

Jungle Strike

Publisher:	Ocean 0161-832 6633
Price:	£25.99 (A500/A600)/£27.99 (A1200/CD^{32})
Versions:	A500/A600/A1200/CD^{32}
System requirements:	1Mb
Release date:	December

⬆ **HOVERING:** Lots of new vehicles and missions. The ability to take control of other attack vehicles is a nice touch.

⬇ **BOVERING:** Check armour, flip to the map. Check fuel, flip to the map. Check weapons, flip to the map. Where am I? Er...

Overall rating	87%

AMIGA FORMAT
Annual 1995

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Steve Bradley casts his beady eye over two collections of games that both contain some of the classic adventures of all time.

Classic Collection – LucasFilm Adventures

Zak McKracken And The Alien Mindbenders. Says it all, really.

The Weavers in *Loom* can weave reality with songs. You play Bobbin, a young weaver whose task is to save the world.

The Secret Of Monkey Island is a piratic, swashbuckling affair and entertaining to boot.

A tale of cheerleaders and all-American kids in *Maniac Mansion*.

LucasFilm, back in the early 1990s, consistently produced the Amiga's best adventure games and *The Secret Of Monkey Island* is top notch. Guybrush Threepwood is the star of this glorious, humorous graphic adventure, where witty word can defeat the might of the sword. Readers, you will, and probably already do, love this game. Essential.

Searching for The Holy Grail while fending off Nazis is a pleasant pastime, particularly when you don't have to leave your bedroom. *Indiana Jones And The Last Crusade* is another point 'n' click affair with puzzles galore and a woman called Elsa Schneider. Getting on a bit now, but fun nonetheless.

More pointing 'n' clicking, this time in *Loom*, an adventure about weaving in an apocalyptic land. Now some four years old, *Loom* isn't the most sophisticated number here but it ain't bad.

Zak McKracken, as the name suggests is a touch more wacky than *Loom*. Journo Zak has to save the Earth from aliens and you roam around solving numerous puzzles and soaking up the marvellous visual humour. Good old-fashioned fun.

And *Maniac Mansion* is more of the same. Kooky, if you will, in that American way. Your mate Sandy the cheerleader has been kidnapped and you explore the maniac's mansion, making contact with all manner of bizarre characters. And it's a whole lot of fun. The best adventure compilation around.

LucasFilm Classic Collection

Publisher:	Kixx 0121-625311
Price:	£29.99
Versions:	All Amigas
System requirements:	1Mb
Release date:	Out now
Overall rating	**89%**

CLASSIC COLLECTION – DELPHINE ADVENTURES

Publisher: Kixx 0121-625 311 ■ £29.99 ■ Versions: All Amigas ■ System requirements: 1Mb ■ Out now

Polygon graphics at their best in the atmospheric *Another World*.

Impressive compilation. Damn. You're supposed to say that at the end, aren't you? No matter, these are all adventure games. First up, *Flashback*. A futuristic tale of the adventures of Conrad Hart, a man who has had his memory wiped because he was clever enough to discover that the folk in power are Morphs, rather than humans. Conrad has to wade through seven graphically gorgeous levels to return to Earth. The puzzles come thick and fast and there is enough platform and shoot-em-up action to satisfy most gamers. And the sprite is still the best animated and most fluid moving in any Amiga game ever. Brilliant.

Another World was the prototype for *Flashback*. It's similar to it in many ways only less impressive, particularly the gameplay. Scientist gets caught while experimenting. Kidnapped, another dimension, has to get back. You know the style. Good, but not as pretty or challenging as *Flashback*.

For *Cruise For A Corpse* think of *Death On The Nile* by Agatha Christie. Set on a ship in the 1920s, you have to wander around searching for clues and interacting with all manner of shady characters. There is a dearth of quality adventure games on the Amiga and this remains one of the best.

Future Wars isn't very good, so forget that but *Operation Stealth* is a challenging modern warfare affair. Looks a bit old fashioned, maybe, but it plays well enough.

Overall rating	**85%**

BREAKING AWAY FROM THE FLEET

HIGH SEAS
Trader
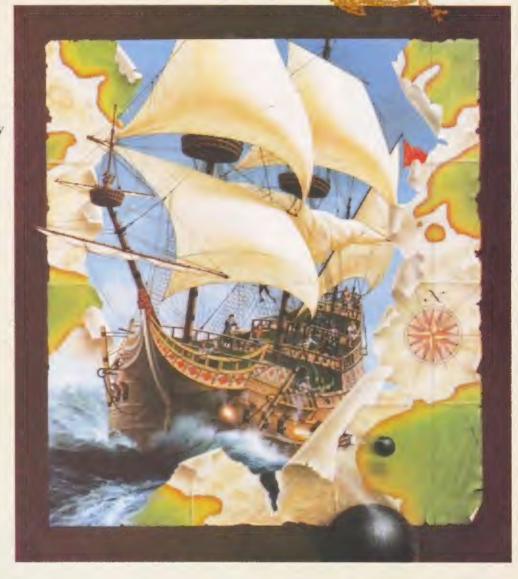
Ever wanted to **sail** into the sunset? Visit **ports** of call known only to grizzled **18th century** sea captains?

Then let our unique **first-person** perspective and stunning **3-D** graphics put the wind in your sails! **Swashbuckle** away as you **trade** goods, vanquish **enemy ships** and create routes to **riches**. Take time to gossip in local **taverns**, repair **cannonball** damage, and stoke up your **crew's** morale. (A little rum, perhaps?)

Chart your progress with our authentic **navigational** aids, and revel in a world long gone: Where **fortunes** are fiercely defended, and only **skill** stands between you and the deep blue sea!

Features:

- Variety of goods to trade and passengers to carry.
- Command a crew of soldiers, sailors and apprentices.
- Defend against pirates and enemy men-o'-war.
- Buy and enhance ships from several models.
- Highly intuitive interface.
- Dynamic pricing and political models.
- Strong replayability.

Travel the world in search of riches

Visit exotic ports on many continents

Engage enemy ships in realistic sea combat

Impressions

Steve McGill dons his frog suit and flippers and dives into the watery deeps. But will he find a buried chest full of glittering treasure, or just an old wreck?

Subwar 2025

Aside from the main piloted sub, you also have wing men whose position and orders can be changed from this screen.

Subwar 2025 represents what is hopefully a new trend in simulations from Microprose. It takes the basic engine of a submarine simulation, marries it to a flight sim, and throws in a good measure of artistic licence as a present for the happy coupling's honeymoon. Or something.

It all works incredibly well too. Subwar is certainly a lot more fun to play than any of the Microprose sims released since the heady days of Knights Of The Sky.

So just what is it that makes Subwar 2025 so much fun? Well, as previously hinted at, it's a submarine sim that plays and handles like a propellor-based flight sim. Which means that the reaction time and instrument watching time is unobtrusive.

In your sights

To make a kill, close-quarter contact is obligatory. It's where most of the artistic licence kicks in. For a start, you can easily see other craft and structures in the water. Which is an impossibility below about 100 metres in real life.

But that's where this game scores high points. For it obeys the law of virtual unreality. An area where more sims would score extra points if they were prepared to flaunt some of the more tedious aspects of physics and weapons systems.

But, that's not to say that Subwar 2025 flaunts the laws of submarine engagements. It doesn't. What it does do is present the data and information in a more user-friendly easy-to-understand package.

For example. In Silent Service 2 the navigation was done using collated data from your crew. It was a trifle tedious and relied on calculations and chart feedback rather than anything visual.

Whereas with Subwar, you've got a head up display that superimposes thermal layers and the weapon targeting systems of the depths on to the cockpit. This is incredibly handy for all of those classic submarine manoeuvres, such as skipping between thermal layers so that enemy sonar loses track of you. Or for 'grey knuckling', a manoeuvre where you turn the sub so quickly that it creates a knot of

FISHING FOR A MISSION

ANTARCTICA

NORTH ATLANTIC
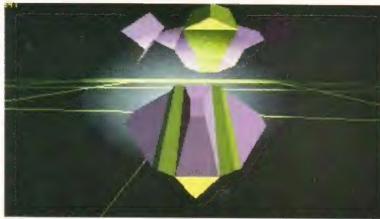
The five missions of Subwar 2025. Despite the fact that the seabed, the marine life and the enemy vehicles aren't texture-mapped like the PC version, there are five different topographically correct mission areas to be engaged in. Dive! Dive! Dive!

SEA OF JAPAN

SOUTH CHINA SEAS

TRAINING MISSION

58

ABOVE: The shading when you hit enemy submarines adds to the spookily atmospheric violence of the action.

LEFT: Lining up targets while trying to remain silent can be tricky. Especially when you know that there are some subs hunting you down.

turbulence and confuses the enemies' torpedoes. Or, failing that, you can fire a decoy from your tubes and hope that it's enough to fool the incoming weapon.

Curiously though, you can still shoot at the enemy visually, even if he happens to be in a thermal layer above or below yours. Tch.

Making music

All the usual views expected of a flight sim are here, including a novel view from the nose of the weapon that you've just fired. More traditionally, tactical, reverse and chase views are also included. If you're being chased, engaged in a dogfight or simply surrounded, the views prove invaluable. They help even the odds and that's got to be a good thing.

The final good thing, and this is a really good thing, is the sound. Very few CD buffs would be able to differentiate between the 8-bit underwater samples and whale song in this game and the 16-bit real

McCoy. And it makes the game very atmospheric – worth plugging into the hi-fi to heighten the tension.

The only gripe that can be held against this game is that Microprose haven't included a serial link. This sim would be a real killer of a game if you could go head to head against a friend. Considering that you also

have robot-controlled wingmen the stealth and tension would be nigh on unbearable.

Despite that, the game is still highly recommended and, with any luck, Microprose will release more sims with the same kind of frivolous artistic licence toward physical reality as *Subwar 2025*.

This is the central control room of the home base. All the major preliminary functions of *Subwar 2025* are accessed from here.
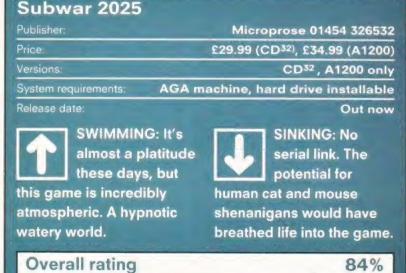
■ **It's a submarine sim that plays and handles like a propellor-based flight sim.**

Not so much a turkey shoot as a seal clubbing club. Take them out with your torpedoes.

There are eight character profiles to choose from. Here we see a famous Ayrshire patron.

Subwar 2025	
Publisher:	Microprose 01454 326532
Price:	£29.99 (CD32), £34.99 (A1200)
Versions:	CD32, A1200 only
System requirements:	AGA machine, hard drive installable
Release date:	Out now

⬆ **SWIMMING:** It's almost a platitude these days, but this game is incredibly atmospheric. A hypnotic watery world.

⬇ **SINKING:** No serial link. The potential for human cat and mouse shenanigans would have breathed life into the game.

Overall rating	**84%**

Some people say that when you've seen one cute, scrolling platform game you've seen them all. But, asks Steve McGill, have you seen all of this one?

Marvin's Marvellous Adventure

Here's an interesting variation on a theme. Instead of running or jumping you can float.

The cannon is a ball, especially if you want Marvin to go up in his platform world.

Just look at those graphics. They leave you in no doubt that this is a platform game.

Marvin's Marvellous Adventure isn't the most challenging Amiga game of the year. But on the plus side there is a lot of it. The words quantity and quality spring to mind.

Collect fruit, run over collapsing bridges, collect more fruit and jump about till you reach the end.

P lots in platform games serve two purposes. They let the publisher of the game invent a setting and a character and then let them talk about said character and their world as if they're real or cute or interesting or different.

Their second purpose is that of space filling for the journos writing about them. It usually runs along the line of: "Oh God another platformer with another stupid plot. But for what it's worth..." and then the plot is regurgitated to the hapless punter.

OK, so the same sort of introductory device has been used here to fill space because there isn't all that much to be said about *Marvin's Marvellous Adventure*. It's a collect-em-up with a cute central protagonist and a colourful backdrop that tries hard to keep you interested

but never quite manages it. The whole package consists of four disks and it runs on the A1200 only. There are five worlds to be explored and conquered and each of these is split into several little levels of varying complexity.

The first thing that strikes home about *Marvin* is the tedious left to right linear scrolling. Marvin can't climb any higher than one screen, so the only direction he can travel is from left to right, which is a pity.
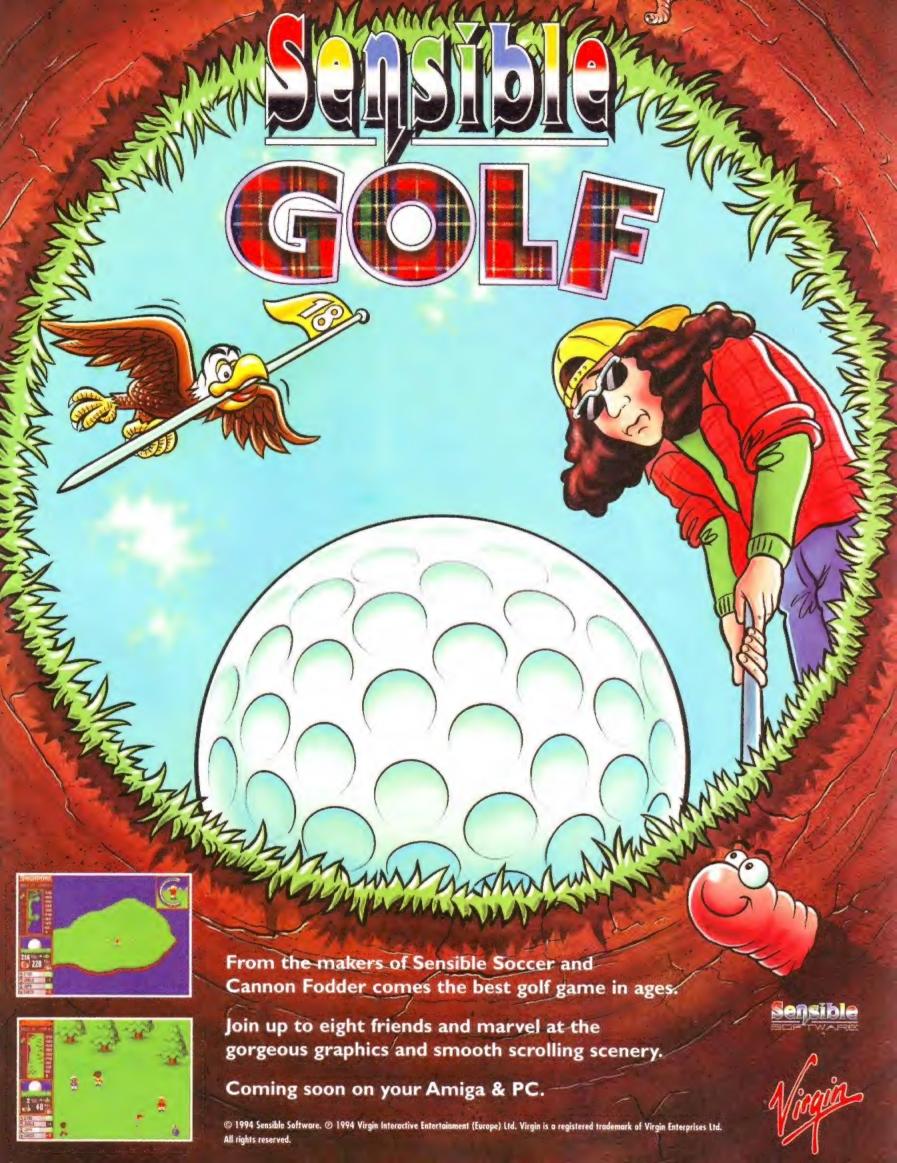
Marvin is slightly more playable with a CD^{32} controller, which uses the red button for jumps, green for kicking, punching and firing weapons, and blue to drop from one platform to the next. No matter how much the CD^{32} controller improves the game's playability there's no hiding the fact that there really isn't a great deal of playability going on.

The game's too simple, too linear and too boring. Nick Veitch likes *Marvin* because he thinks it's cute. But sometimes he can be vacuous and girlie like that. *Marvin*'s a good game for young children, anyone else should give it a miss.

Marvin's Marvellous Adventure

Publisher:	21st Century 01235 851852
Price:	£29.99
Versions:	A1200, CD^{32}
System requirements:	AGA machine
Release date:	Out now

⬆ **JUMPS:** Nice control system. Bright, colourful graphics. Good scrolling.

⬇ **FALLS:** Tedious, boring, no pace or excitement. Repetitive creatures.

Overall rating   **64%**

From the makers of Sensible Soccer and
Cannon Fodder comes the best golf game in ages.

Join up to eight friends and marvel at the
gorgeous graphics and smooth scrolling scenery.

Coming soon on your Amiga & PC.

WELLA

Invisible Cities

SHOCKWAVES

In conjunction with *AF*, Wella Shockwaves have a complete Amiga rendering system worth over £3,000 to give away!

Invisible Cities and Flair are working on a new game called *Shockwaves Express*, and here is your opportunity to actually design elements of the game itself – the logos, the characters, the levels, the graphics... if your ideas are cool enough to make it into the game, you stand the chance of getting your name in the credits – and walking way with three grand's worth of Amiga kit!

WACK

EXPRESS

Wella Shockwaves are **gonna put** **you** in **CONTROL!**

£3,000 COMPO!

Win An Amiga 4000, with 16Mb RAM, a Warp Engine accelerator and a copy of Lightwave 3D!

Shockwaves Express: the plot...

Shockwaves Express is set in the future world of 2007 where information is a valuable commodity. But with a network overrun by hackers, corporations have been forced to abandon cyberspace in favour of more conventional means. Teams of skilled street skaters cruise The Strip acting as info-couriers delivering data by hand – for a price.

Progressing through eight different 'hoods, the player has to meet and beat the challenge of delivering these mysterious info-packs using skateboards, hoverboards, surfboards and snowboards. Making your way from location to location, you have to avoid obstacles, defeat rival gangs and react quickly under adverse conditions.

But as you fulfill each contract and progress through the game, it becomes obvious that there's more to the job than meets the eye...

Shockwaves Express: the compo...
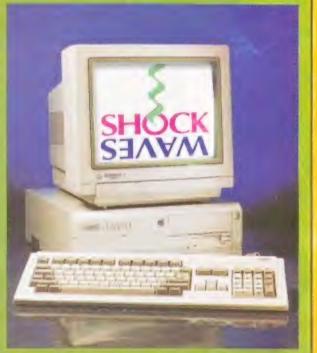
Invisible Cities and Flair want you to help design *Shockwaves Express*. We need narly new characters to take control of, with names, uniforms, skills, attributes and emblems.

We need enemy characters to inhabit the different areas of The Strip. We need different sort of obstacles for the couriers to overcome. And we need a radical *Shockwaves Express* logo.

But don't stop there. If there's anything else you want to design – entire levels (it's a sprawling eight-way scroller), buildings, boards, vehicles – just let rip with your imagination. The more outrageous, the better.

Obviously this is going to take some time so you have a couple of months to the closing date – let's get everything in by the beginning of February, eh? Send all your artwork, scripts and Amiga graphics to:

Shockwaves Compo, Invisible Cities, Unit 16, Business & Innovation Centre, Riverside, Sunderland SR5 2TA.

Shockwaves Express: the prize... An Amiga 4000 80Mb HD with 2mb Chip RAM, 16Mb SIMM, a 40MHz Warp Engine plus a copy of *Lightwave 3D*. (Sorry, but the Commodore monitor is ours!)

Mini verses Cinquecento. Michael would never have pulled off The Italian Job in three Fiats though. Altogether now: "We're the self preservation society..."

Can Steve Bradley navigate his way safely around the track as he plays this new rallying game from US Gold. Or will he come a cropper?

Power Drive

No matter how many times you try, you simply cannot run over the crowd, nor can you spray mud in their faces.

At the end of each race, a screen informs you of the damage done to your vehicle. They cost a fortune to repair.

W hen Peter Purves, presenter of the excellent early Eighties cult motorcross series, *Kickstart*, gets to take charge of the World Rally Championships, it will resemble something like this.

The tasks would be infuriatingly difficult and would include some expendable sections involving manoeuvring through cones. Of course, the car itself would be virtually uncontrollable. You'd get stuck in hedges, cones would scatter as you tried to squeeze through gaps at which even Colin McCrae would gasp and your powers of polite speech would gradually deteriorate.

Out of control
Power Drive is a viewed-from-above car rallying game. Can you become the world's best rally driver? On the Amiga? You start with a choice of motor vehicle – the Mini Cooper S or perhaps the Fiat Cinquecento Turbo. Whatever, it moves. And you have money too, for rallying, as Malcolm Wilson's Dad will only too readily inform you, is an expensive business. Upkeep and all that.

What follows is a series of tasks, be it time trial, head-to-head race, special speed trial or skill test. Eight rounds of racing, each in a different

The battle of the Starsky And Hutch has to be the finest race in *Power Drive*.

See how I skid my Renault Clio? See how I make the marks on the road?

country in varying weather conditions. And with up to eight stages in each round, it would be fair to point out that one thing *Power Drive* does not lack is magnitude.

Get in control
Controlling the car is not easy. The slightest nudge on the joystick sends it into oversteer – you career wildly across the road before getting trapped at the side. This is very annoying, particularly in a head-to-head race against the computer (there is no simultaneous two-player mode) because the computer-controlled cars don't make mistakes.

So as you flounder by the roadside, slapping the spacebar to get into reverse, moving backward, slapping the spacebar again in order to propel yourself chequered flagward, your opponent happily motors along the middle of the road taking bends with aplomb.

Practice. Well, yes. Practice improves your vehicular control, but competence doesn't make *Power Drive* fun to play. US Gold have tried to produce a realistic rallying game, which is virtually impossible. You simply don't get the feel of the car.

There are any number of superior racing games, and some available for a third of *Power Drive*'s hefty thirty nicker tag.

Power Drive	
Publisher:	US Gold 0121-606 1800
Price:	£29.99
Versions:	All 1Mb Amigas
System requirements:	1Mb
Release date:	Out now

⬆ **FAST CAR:** There are eight countries to race in, with up to six stages in each. It's huge.

⬇ **OLD BANGER:** The handling of all the cars is terrible. And they sound like lawnmowers.

Overall rating   49%

AMIGA GOLD FORMAT

We gave **Steve Bradley** some disks and told him that one game was the non-AGA version of a classic and the other was an average platformer. Here's what happened...

Theme Park 500

From little sideshows do mighty theme parks grow. By managing your resources cleverly and looking after your staff and the punters, you can create a mighty entertainment empire. Probably.

One of the biggest games of the year is Bullfrog's *Theme Park*. Chances are you've heard of it, but for those not 'in the know', here's the plot. You have money. Not a lot, but enough to set you on your way to build, run and maintain a theme park.

For many of you, the thrill will be in the creation of the attractions; the building of the rides, the arrangement of the parks, paths, shops, lakes and burger bars – you name it , you can do it. But the more sober among you may prefer the financial management aspect – your park needs to make a profit otherwise bankruptcy is a very real possibility.

Creating the park is a simple process of clicking on icons and shifting the bits and pieces to particular areas and as your skills develop you learn the best positions to place the amenities – like sticking toilets near the exit to stop folk drifting off simply because they need to spend a penny. The people, your customers, are the most important factor – keep them happy and business will bowl along nicely.

This version differs from the AGA in that there are fewer rides, less shops and only young people visiting the park. In general, it's a little less flash than its posh counterpart but it remains a great game and one of the most accessible sims around.

CHARLIE J COOL AGA
Rasputin 01689 850770 ■ £19.99 ■ Out now

Game plots are usually terrible. This one's brilliant. Walking down the street one day, Charles gets crushed by a falling grand piano, dies and goes to the Netherworld. Which is somewhere, but not really anywhere. So he has to trudge through 28 rather similar levels of platform merriment to get back from somewhere. Which isn't really anywhere.

In the tradition of platform games, the idea is to dodge, jump, collect and kill across seven worlds (including the odd bonus room) of horizontally-scrolling action picking up keys along the way to gain access to the next level. Despite the changes of scenery, the application remains the same. Oh, and there are coins to collect, though I'm not sure why. Interestingly, the number of goodies you collect or baddies you kill determines where you end up – altering the end sequence accordingly. Stunningly average stuff, indeed. An A500 version is also available.

Overall rating	50%

Adults dressed as chickens seem to appeal to young people's sense of humour. Strange that.

Theme Park A500/A600	
Publisher:	Electronic Arts 01753 549442
Price:	£34.99
Versions:	A500, A600
System requirements:	1Mb
Release date:	Out now

⬆ **CANDY FLOSS:** An original, absorbing and, best of all, fun simulation. *Theme Park* is one of the best games of the year.

⬇ **SOGGY CHIPS:** Rather heavy on the financial management side and fewer features than its AGA counterpart.

Overall rating	92%

Find out what visitors think about your services and amend them accordingly. Remember, a happy punter is a spending punter.

Steve Bradley plays one of the most looked-forward-to robotic beat-em-ups of the year. But does it live up to the hype? Or is it just another mediocre effort?

Rise Of The Robots

Nervously, you crouch. Waiting. Waiting for your beastly opponent to inch ever forward. His huge mechanical arms flail. What are you to do? Death, surely imminent. Kick him in the nuts and bolts.

So the robots have finally risen. After a year of hype and bluster, this futuristic, metallic beat-em-up – and after all, it *is* a beat-em-up – finally hits the shelves. And before the majority of magazine reviews have made their stands too. Tsk.

But listen to the manual: '*Rise Of The Robots* is a new 'generation' computer game conceived to combine state-of-the-art programming design and graphics display. *Rise* was created using the Auto Desk *3D Studio* CAD software package. *3DS* is fundamentally a rendering package.'

Corks – sounds pretty impressive, eh? And this game looks mighty good. Load up the disks and you're treated to some quality rendered visuals. Not only that, programmers Mirage have got Queen's Brian May on board to execute some axeular wah wah effects. Hurrah! It's taken some time to put this lot together. *Rise Of The Robots* is, apparently, the first game to be simultaneously released on all formats. History in the making, eh?

Along the way though, it seems that one vital ingredient has been neglected. Gameplay. Stick the difficulty level on to Medium in one-player mode and take on your first opponent. The Loader Droid is a huge, awkward-looking mechanical beast. How can you possibly beat him? Easy. Move your joystick to the top diagonal right position, and if you're feeling lethargic, why not use autofire. Now chat with friends. Or read a book. It doesn't matter, for you don't need to look at the screen. A guaranteed victory. OK, so the Loader Droid isn't meant to be a pugnacious opponent but cripes, you've just spent £43. A teensy bit of action wouldn't go amiss.

Not that beating the other five (phew, count 'em) metallic beasts is so easy, though they still ain't much of a challenge. It's more that this is just a horrible game to play. It takes an age between manoeuvring the joystick and the movement taking place on screen. *Rise Of The Robots* just feels… well, it doesn't feel at all.

C3PO: SOFT AS BUTTER

CYBORG DROID: The only robot you get to play, unless in training mode, the Cyborg is intelligent but a bit soft.

LOADER DROID: An old, and somewhat stupid robot. If you can't beat this chap, retire to Worthing immediately.

MILITARY DROID: Has advanced artificial intelligence, apparently. Vulnerable to extremely heavy blows. You'll beat him.

BUILDER DROID: Huge, ape-like robot. Slow to react, trap him in the corner and kick him until he falls over. Easy.

SENTRY DROID: A tough opponent, the Sentry Droid has few weaknesses. He looks a tad stupid, however.

CRUSHER DROID: This chap has got a particularly long reach, but he's rather vulnerable to the counter attack.

A dead robot. This screen appears every time you win. Subtle, eh?

TOP: After each bout, the loser gets to view a pretty, if rather unpleasant picture of himself.
ABOVE: And from a great height did the Crusher Droid attack you.

I cannot recommend you buy this game. You're as well to look at the screenshots in the magazines as to spend over 40 quid. The five-disk intro looks tremendous. But you only ever watch these things twice. The robots look fabulous. The attention to detail is excellent, the movement fluid, in a mechanical sort of way. They're supposed to have artificial intelligence which allows them to read your moves and act accordingly.

So why is it that you can squeeze them into a corner and tap away at them until the bout is yours? Simple moves like crouch and kick are very effective, but after winning five bouts on the trot, you get rather bored.

If you want to buy a beat-em-up then plump for the superb *Mortal Kombat II*. OK, so it's thin on the ground robot-wise but it's a lot more fun. I really hope you don't get *Rise Of The Robots* for Christmas. 🄰

Rise Of The Robots

Publisher:	Time Warner 01604 602800
Price:	£42.99 (AGA), £34.99 (CD^{32})
Versions:	AGA, CD^{32}
System requirements:	AGA machine
Release date:	Out now

⬆ **ROBBIES:** It looks nice.

⬇ **MARVINS:** Completely lacking in the essential ingredient commonly known as gameplay. What a pity.

Overall rating	**19%**

Football Glory is a pretender to the *Sensi* throne. Steve McGill reckons that proves that even when you're dead you shouldn't lie down and let yourself be buried.

Football Glory

The cluttered, 2D look of this menu screen contributes to the unpolished feel.

The blurb on *Football Glory*'s box reads 'The best arcade soccer game EVER'. Which is a rather bold, contentious statement that may just succeed in persuading the casual Christmas shopper to part with their hard-earned cash.

Before *AF* even considers the riposte, "compromised editorial integrity", we're going to have to prove why such a bold, contentious statement is, at best, misguided.

Consider the following analogy. You've just walked into Dixons and you're in the market for a new video recorder. The most important features you're looking for are picture and sound quality. In gaming terms, assume that this means playability and longevity.

Standard to set

Other features such as play, fast forward, rewind, a tuner and a four-event timer are just expected to be there, so they can't and shouldn't really be considered beneficial features anymore. Merely standard ones.

Take, for example, pitch surfaces. *Sensi Soccer* boasts seven of them, while *Football Glory* manages only four. So, in that sense, *FG* doesn't even come up to a set standard.
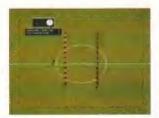
And what about the competitions on offer – leagues, cups and the like? *Football Glory* offers six: Champions League, UEFA Cup, English League (Premiership), Cup Winners Cup, World Cup and the European Championship. Not bad.

Whiter shade of pale

But it pales into insignificance when you consider that *Sensible World Of Soccer* provides over 140 pre-set competitions. So that, if you do happen to be one of the minority of football fans who don't actually support an English Premier League team, you're still going to find that you're catered for.

Consider further that in order to knock the top game off its perch, you've not only got to match what it has on offer, you've got to be bigger and play better than it. *FG* doesn't manage that.

After you've mastered some basic mechanical control, team formations help players develop
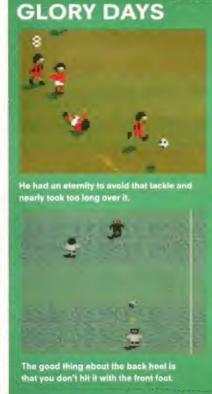
Why people would mistake *Football Glory* for *Sensible Soccer* is beyond us.

The options screen with AGA background displayed in its radiant colours. Beat that *Sensi*.

There are two replay modes available. This is the one that's different from *Sensi*'s.

GLORY DAYS

He had an eternity to avoid that tackle and nearly took too long over it.

Cantona tries one of those impossible bicycle kicks which worked on this occasion.

Barcelona find a Speedburst at the right moment fools the opposition.

The good thing about the back heel is that you don't hit it with the front foot.

And Giggs, the man with the left foot, shows what he thinks of *Football Glory*'s special moves by volleying in on the rebound.

72

ADJUSTABLES

Football Glory is heralded as an AGA game. There are six AGA menu backgrounds to choose from. You can adjust their colour and brightness. Beat that, *Sensi Soccer.*

Close your eyes and see what happens.

If football hadn't been invented then...

...we'd probably all be frustrated players.

Of course, what we really want to know...

...is what is the point of being able to...

...adjust the colour and brightness?

The shortage of formations to play is characterised by a complete lack of choice.

The customisation of kits is adequate but there could have been more colours to choose from.

their own footballing style and add to the gameplay. For example, you might like playing aggressively. Therefore choosing an attacking formation makes sense. The same rings true if you are more defensive in your approach.

Yet *Football Glory* offers only four formations. Compare that to the 18 offered in *Sensible World Of Soccer*, six of which are user-definable for extra control. So it's not so much *Football Glory* as *Football Disgrace.*

But don't get us wrong, *Football Glory* ranks as one of the top five Amiga football games on the market at the moment. The inclusion of novel moves – outlined in the box at the bottom of the previous page – such as speedburst, bicycle kicks and volleys give the game a less predictable nature than *Sensi.*

Moveable feast

There's no doubt that the extra moves will win converts to the *Football Glory* cause. Skilful use of them pays dividends, and no matter what the general consensus, there are always going to be significant numbers of people who would rather play an alternative to *Sensi's* smooth-flowing passing game.

This is the options screen with AGA background displayed in its radiant colours. Beat that *Sensi Soccer.*

Football Glory is a gritty, playable, pretender to the throne of Best Football Game Ever, at present occupied by *Sensible Soccer.* As such, it'll gain converts to its cause. But, as with most pretenders, the monarch is in possession of all the aces and resources of the state. Which means that *Football Glory's* going to get its head cut off when its face to face confrontation with *Sensible World Of Soccer* takes place in the battlefield of Amiga gamers' pockets.

■ There's no doubt that the extra moves are going to win converts to the *Football Glory* cause.

Football Glory

Publisher:	Kompart 01438 840004
Price:	£29.99
Versions:	A1200/A4000 only
System requirements:	2Mb, hard drive installable
Release date:	Out now

⬆ **GLORIOUS:** A brave attempt at usurping the *Sensi* throne. And who knows, they might just perfect it next time.

⬇ **INGLORIOUS:** The AGA backgrounds are a waste of disk space when other features could have been included.

Overall rating	80%

Steve Bradley is pleased to bring you *Amiga Format's* absolutely amazingly comprehensive run-down of all the best-selling Amiga games.

The top games

CLOCKWISE FROM LEFT: More than a year old, but *Soccer Kid* is now charting at number three; *Global Gladiators* – a surprise chart-topper; *Bubba 'n' Stix* – a lowly 28 in the A500/A600 Top 30, but number three in the CD³² charts; David Braben's space strategy sensation *Frontier: Elite 2*. **CENTRE:** A year in the charts and still in the Top 10 – the remarkable *Cannon Fodder*.

The charts are copyright ELSPA

ARCADE POOL: We said it when it was released, and we'll say it again – *Arcade Pool* it's got balls.

In the making...

JANUARY
Battle Isle 2 AGA (Blue Byte)
Get tanked up, again.
Jungle Strike CD³² (Ocean)
Helicopters work to rule in leafy environment.
King-Pin (Team17)
Beat the bowling alley blues.
Sensible Golf (Virgin)
Top-down, check-trousered extravaganza.
Shaq Fu (Ocean)
Basketballer beat-em-up
Skeleton Krew (Core)
Isometric shoot-em-up.
Skitchin' (Ocean)
Road Rash on roller skates.
Super Loopz (Audiogenic)
Pipemania-esque puzzledom.

FEBRUARY
Baldy (Mindscape)
God game involving folk bereft of hair.
Chaos Engine 2 (Renegade)
Bitmapped shoot-em-up.
Cyberwar CD³² (SCI)
Virtually virtual reality 3D shoot-em-up.
Legends (Krisalis)
Zelda-esque role playing game.
**Mega Race CD³²
(Mindscape)**
Handsome-looking racer.
**Spherical Worlds
(Black Legend)**
Top-down view shoot-em-up.
The Big End (The Hidden)
Isometric-viewed racing game.

THIS MONTH'S TOP 30 A500/A600

1.	Mick And Mack: Global Gladiators (Virgin)	86%
2.	On The Ball: World Cup Edition (Daze)	80%
3.	Soccer Kid (Krisalis)	FG93%
4.	Frontier: Elite 2 (Gametek)	FG90%
5.	Club Football: The Manager (Software Business)	79%
6.	International Sensible Soccer (Renegade)	FG93%
7.	Cannon Fodder (Virgin)	FG95%
8.	Premier Manager 2 (Gremlin)	80%
9.	Championship Manager '93 (Domark)	82%
10.	European Champions (Ocean)	73%
11.	Skidmarks (Acid)	FG90%
12.	Kick Off 3 (Anco)	79%
13.	Tactical Manager (Kompart)	78%
14.	Wild Cup Soccer (Millenium)	Not reviewed
15.	The Settlers (Blue Byte)	FG94%
16.	World Cup Year '94 Compilation (Empire)	FG94%
17.	Lemmings 2 (Psygnosis)	FG94%
18.	Ruff 'n' Tumble (Renegade)	87%
19.	Detroit (Impressions)	69%
20.	Valhalla (Vulcan Software)	23%
21.	Formula One Grand Prix (Microprose)	FG92%
22.	Mortal Kombat (Virgin)	74%
23.	Beneath A Steel Sky (Virgin)	FG94%
24.	Zool 2 (Gremlin)	FG93%
25.	The Patrician (Ascon)	79%
26.	Leeds Utd Champions (CDS)	32%
27.	Liberation (Mindscape)	80%
28.	Bubba 'n' Stix (Core Design)	89%
29.	Fury Of The Furries (Mindscape)	55%
30.	Man Utd Premier League Champs (Krisalis)	80%

Top 10 Budget

1. Champ Manager '94 (Domark)	65%
2. Corkers Compilation	
(Core Design)	Not reviewed
3. Batman Returns (Gametek)	48%
4. Classic Board Games	
(Merit)	Not reviewed
5. Arcade Pool (Team 17)	FG94%
6. PGA Tour Golf Plus	
(Hit Squad)	FG93%
7. Utd PLC Data Disk	
(Krisalis)	Not reviewed
8. Populous 2 (Hit Squad)	FG90%
9. Monkey Island 2 (Kixx XL)	FG94%
10. Sim City Classic (Maxis)	83%

Top 10 A1200

1. Theme Park (Electronic Arts)	FG91%
2. UFO: Enemy Unknown	
(Microprose)	FG90%
3. Super Stardust (Team17)	FG90%
4. Banshee (Core Design)	FG90%
5. Kick Off 3 (Anco)	79%
6. Civilisation (Kompart)	Not reviewed
7. Fields Of Glory (Microprose)	44%
8. On The Ball: World Cup Edition	
(Daze)	80%
9. Soccer Kid (Krisalis)	FG93%
10. Gunship 2000 (Microprose)	FG94%

Top 10 CD32

1. Arcade Pool (Team 17)	FG90%
2. James Pond 3 (Millenium)	75%
3. Bubba 'n' Stix (Core Design)	89%
4. UFO: Enemy Unknown	
(Microprose)	FG90%
5. Cannon Fodder (Virgin)	FG94%
6. Jetstrike (Kompart)	78%
7. Nigel Mansell's World Championship	
(Gremlin)	73%
8. Guardian (Acid)	88%
9. Humans 1&2 (Gametek)	78%
10. Simon The Sorcerer	
(Adventure Soft)	67%

Moody and atmospheric. *Beneath A Steel Sky* and Steve McGill are both these things. McGill's also very tall. And he's reviewing *Fields Of Glory*. And *Roadkill*.

CD³² Games

One of the big Christmas games on floppy-based Amigas last year, **Beneath A Steel Sky** (Virgin 0181-960 2255, £29.99) featured the artwork of Dave Gibbons of *Watchmen* fame coupled with a complex adventure engine and a more-than-engaging plot.

The CD³² version is exactly the same as the original except for the inclusion of speech and exclusion of RSI-inducing disk swaps.

I completed the floppy version for the tips section of sister magazine *Amiga Power* and even though I knew exactly what I was doing, it still took over 30 hours solid playing time to finish the game. Admittedly, a fair proportion of that time was spent

disk swapping (the floppy version came on 15 disks).

But that couldn't hide the fact that it looks and feels as if you're interacting with a comic book. The characters you meet aren't the wooden fill-ins that tend to populate lesser point-and-click adventures.

And, more importantly, there are several red herrings thrown in to deliberately confuse and deceive the adventurer – keyboards to be pressed, cupboards to be opened, that sort of thing. Moreover, certain actions have to be completed in real time, such as stealing Hobbin's spanner while he's away. This bit is tricky, and I found it nigh on impossible using the CD³² controller. A mouse soon rectified the fault.

If you own a CD³² and have never played *Beneath A Steel Sky*, treat yourself. It's an excellent adventure – atmospheric and compelling – and the speech adds to the mood, if you're into that sort of thing.

Last month, *AF* reviewed the floppy version of **Fields Of Glory** (Microprose 01454 326532 £34.99). It received a low mark of 44 per cent due to what we figured was a fundamental flaw in the mechanics of the game. Namely, that despite the seeming inclusion of natural terrain hazards such as rivers, hills, and woods, they bore no relation whatsoever to the progress of troops.

Unfortunately, this glaring fault hasn't been rectified with the CD³² version. In effect, the battlefield is as flat and obstacle free as The Battle Of Guagamela at Arbela – the decisive battle between Alexander The Great and Darius King Of Persia where the Persians had flattened the fighting area months in advance.
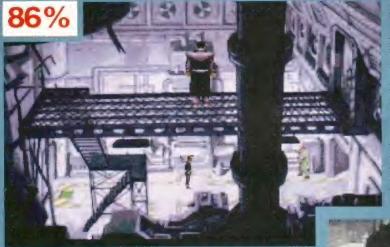
There are six battles to be fought in all. Two of them are fictional to help the gamer familiarise themselves with the tactics and control system and the other four are based on true historical battles as they happened – the most famous being Waterloo.

This problem is a shame, because the graphics and real-time action

Continued overleaf ➡

BENEATH A STEEL SKY: And remember kids, if you're ever offered any drugs that make you think you can fly, just say no.

86%

BENEATH A STEEL SKY: A fantastic adventure that no self-respecting CD³² owner should be without. So, when you're hanging up a stocking at the end of your bed, leave a note for Santa, along with some biscuits.

75%

ROADKILL: It's a real pity that we didn't have space to show you more pics of the intro. It's the best anim rendered with *Imagine* that you'll ever see. Probably.

ROADKILL: And the car in front is absolutely unique except for the one behind it which is absolutely identical. Meanwhile, the car with the copper top takes the lead.

ROADKILL: The ultimate tension reliever in traffic congestion has to be the homing rocket. If only real cars disappeared the way cars do in *Roadkill*.

◄ make *FOG* more exciting than your average wargame. Microprose have implemented a mechanism called Close Quarters Combat System which lets you see skirmishes and fights at a Brigade level where one figure represents about 70 men.

Exciting stuff indeed, which makes the flat terrain flaw all the more exasperating. Still, the CD³² version offers the same database of commanders as the PC version. But,

49%

FIELDS OF GLORY: The inclusion of the database on the CD³² version of *FOG* is a welcome addition. Unfortunately, it can't be used during the actual battles. Which makes it little more than a redundant, though entertaining, filler. Let's hope there's a *Fields Of Glory 2* in the offing.

unlike the PC, the database can't be accessed during a battle. Which pretty much makes it ineffective.

All in all, *AF* would like to recommend this, but the glaring fault of the flat terrain makes a mockery of any tactics and strategies employed by budding commanders.

Overhead racing games are nothing new in the world of computer games. **Roadkill** (Acid Soft via Guildhall Leisure 01302 890000, £29.99) follows on in the tradition of great games such as *Super Sprint*, *Super Cars 2* and *Micro Machines*.

It features one of the best intros to a game that you'll ever see – a fantastic 3D-rendered real-time race featuring professional zooms, tracks, pans, motion blurs and lens flares. It's gruesome in parts – drivers get cut in half after spilling on to the track.

But anyway, that's enough about intros that have absolutely no bearing on a game. Following the traditional course of overheads, the steering system is rotational. The make or break of the playability in this case is the amount of traction, steerability and control given to the car.

Many overheads have been ruined by being too slippy slidey so that the player feels as if they're driving on an ice rink with bald tyres.

Not so with *Roadkill*, which was written in *Blitz Basic*. The traction is just about perfect. There are many combinations of 90 degree and hairpin corners and by taking the correct approach and getting throttle control right you can achieve perfect cornering almost every time.

Of course, driving about on a track, no matter how exciting that track is, by yourself is a bore. So there are eight computer-controlled opponents to race against. And to add spice to the racing, there are various pick-ups and power-ups which let you implement nefarious actions such as wasting opponents with missiles, speedbursting to higher top end velocities, mending damaged armour and others that we'll leave you to find out about.

But it's not only the pick-ups that enhance the racing: there are built-in obstacles and aids on the courses as

ROADKILL: Choose from any of six cars. Some feel different when you're driving them.

well. Speed ramps send your car helplessly out of control, kill zones let you bash other cars to death and mined shortcuts give you the extra edge which means the difference between qualifying or failing.

In all, it's an excellent little package to play. But it does suffer from some major shortcomings. It only features four levels with three courses to each level. More than a bit stingy considering that there's an incredible amount of storage space on a CD and that many of these courses could just as easily have been randomly generated using a tiling system.
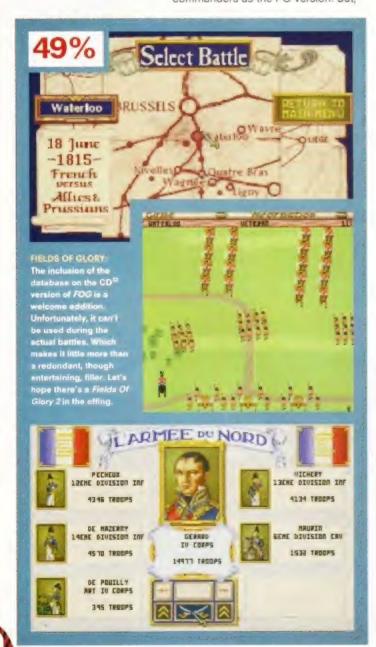
So a considerable amount of marks are lost for that. And to compound the problem, there's no two-player option, no serial-link, no split screen or two players on screen at the same time. Which, when you're asking the punter for 30 quid for a game, is nigh on unforgivable.

Sadly that means what should have been a high eighties game can only be given a mid-seventies mark.
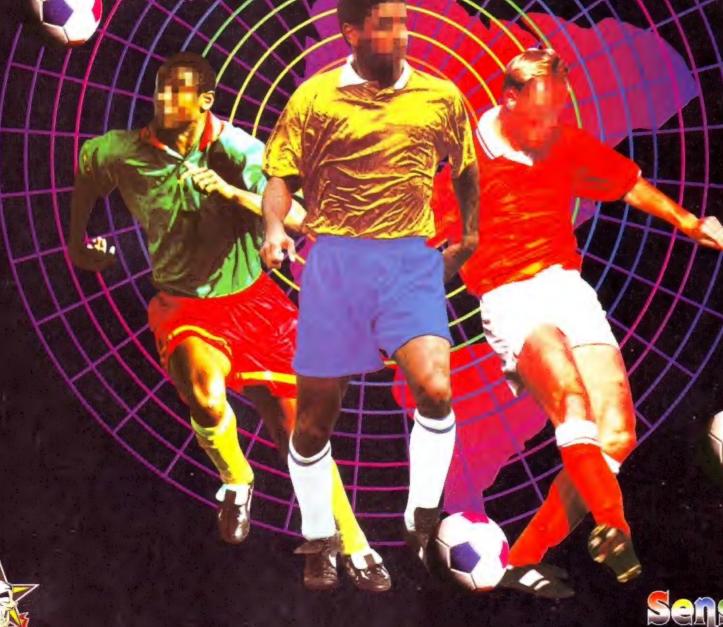
The game, its presentation, technical implementation and gameplay execution is so polished that it doesn't so much shine as radiate. But the price, small number of courses and lack of a two-player option cast a shadow so dark that it blights the complete package. ◢

ZAPPO CD DRIVE

All the CD³² games were tested with the Zappo CD drive. *Roadkill* and *Fields Of Glory* work fine, but *Beneath A Steel Sky* does not work on the Zappo drive.

HIGHEST SCORE: 90%

LOWEST SCORE: 5%

Don't buy a turkey this Christmas

AMIGA POWER

The magazine that plays the game

Stephen Bradley looks forward to a frightfully festive season full of frolicsome fun and, er, flight sims...

Re-Releases

89%

REACH FOR THE SKIES: Isn't that what they used to say in Westerns?

SPEED 140 MPH · HEADING 291 DEG · ALTITUDE 5139
VIEW OUTSIDE · CALLSIGN EAGLE 1
NAV INFO CIRCLE · RANGE 17 MILES · BEARING 229 DE

90%

THEIR FINEST HOUR: A delight of droning engines, dogfights and handlebar moustaches.

Combat Film Review: · CAMERA

ALTITUDE 0 · 10000
CLIMB -4999 · CLIMB 0
HEADING 215 · HEADING 150
PITCH -90 · PITCH -25
AMMO · AMMO 999

CURRENT CLIP · REW STOP PLAY FWD PAN · EXIT · YOU GRND
SAVE · LOAD · CHASE COCKPIT FREE · AIR BOMB

S
hort trumpet fanfare...
Re-Releases returns after a
month on the bench and by
jove, there are some truly
excellent second-time-arounds this
Christmas particularly for those of
you who like to take to the skies. The
ageing *Their Finest Hour: The Battle
Of Britain* (Kixx XL, 0121-625 3311,
£16.99, *AF11* 90%) receives a re-run
as does *Their Finest Missions* (Kixx
XL, £10.99, *AF28* 83%), to utilise
which, you need the original.
Graphically, you will have seen better
games but *Their Finest Hour*, with its
droning engines and dogfighting
retains a certain atmosphere.

There are heaps (not heaps,
they're pretty good, actually) of
planes to fly and missions to tackle
but unfortunately it can't quite
compete with the comparatively
recent *Reach For The Skies* (Hit
Squad, 0161-832 6633, £14.99, *AF48*
90%) from ace flight sim coders
Rowan Software, responsible for,
most recently, *Overlord*. Again, the
subject is The Battle Of Britain, only
this time, there is a tad more strategy
involved. You can join the RAF or
Luftwaffe, or you can stay at home
and play a flight sim.

Options are more than plentiful,
the range of controls is almost
baffling – if you wish, you can play
the controller enabling you to
determine the types and number of
bombers sent out on missions. A
good choice.

Shuttle (Hit Squad, £14.99, *AF41*
70%) meanwhile, doesn't quite
contain the excitement of the Second
World War. Serious sim fans only
Continued overleaf ➡

80%

You too can be one of those
magnificent men in their flying
machines with *Dogfight*.

DOGFIGHT

Oh no, another flight sim.
Dogfight (Powerplus,
£16.99, *AF53* 81%) covers
all eras, from World War
One to the present day. You
can choose to either
dogfight till death or
attempt to complete a
series of mission objectives.

The best thing about
this is the What If option
where you can pit planes
from different eras against
each other – Spitfire versus
Stealth Bomber anyone?
Dogfight is a solid enough
flight sim but it lacks a
certain atmosphere – and
it's darned difficult too.

MONKEY ISLAND 2 - LE CHUCK'S REVENGE
■ Kixx XL ■ 0121-625 3311 ■ £16.99 ■ *AF36* 95%

94%

T
his is one of the few games whose appeal has not
diminished with age. Nothing since the LucasFilm
classic has quite matched its humour, or its
combination of action, puzzle and adventure and it still
looks incredibly slick.

Amiga Format regularly receives at least 10 letters
a month asking for tips from people who are still trying
to fathom the intricacies of the game, even after two
and a half years. We're talking classic here. Everything
the original *Monkey Island* excelled in, the sequel

improves upon – better animation sequences, more
character interaction and bundles of humour.

Taking the part of the quite splendidly-monikered
Guybrush Threepwood, you point 'n' click your way
through a vast gaming area (11 disks, phew!)
attempting to solve all manner of puzzles. Yet even
when you think you've cracked it, a cunning plot twist
usually sets you back on your heels leaving you feeling
baffled, bemused and bewildered. If you haven't
already got this game, why?

MONKEY ISLAND 2: A classic combination of
puzzles, humour, adventure and a silly name.

70%

SHUTTLE: A flight sim for the serious contender rather than the death-or glory-let's-loop-the-loop-brigade. The first challenge is completing the manual.

89%

F-117A NIGHTHAWK: Cruise around the world's trouble spots in your Stealth Bomber, safe in the knowledge that you won't get picked up by radar... KABOOOOM... er, much.

need apply, as you embark on a mission to fly NASA's baby to lands far away. Although it's reasonably attractive, *Shuttle* is incredibly techie but if you can get over the shock of the manual, and are prepared to persevere with the plethora of controls, then best of luck.

More modern warfare-ular pursuits abound in *F-117A Nighthawk* (Powerplus, 0276 684959, £16.99, *AF54* 92%) as you attempt to blast your way through the troublespots of Central Europe, Korea, 'Nam (as they used to say), Cuba and the Persian Gulf. And Cornwall. Three levels of conflict here – Cold, Limited and Conventional –

and they basically reflect how much mindless destruction you can cause. The 3D graphics make pleasant viewing and with the old crate being a stealth bomber, it's that much tougher for the 'Hun' to pick you up. If you have a cupboard full of flight sims, you probably won't need this example, but it remains a choice member of the genre.

That's enough flight sims, let's take a stroll around the links (wasn't that a helicopter? Doh!). There still isn't a golf game to touch **PGA Tour Golf** apart perhaps, from *PGA European Tour*, the recent full-price follow up. Yes, *PGA Tour Golf* (Hit Squad, 0161-832 6633, £14.99, *AF22*

90%), despite its sparse graphics remains the most playable golf sim around and now it's even better. The original had three courses and with another three added, *PGA* represents quite tremendous value for money at under 15 sovs.

Sure, it doesn't quite match up visually to *Links* or *Nick Faldo's Golf*, but you can pick up *PGA Tour* in minutes. The control method is delightfully concise, the gameplay intuitive, and while heathens may suggest that golf is a totally ridiculous pastime to play on a computer, *PGA Tour* remains one of the Amiga's most compelling and enduring games. Thoroughly recommended.

93%

AMIGA GOLD FORMAT

INSTANT REPLAY

PGA TOUR GOLF: What it lacks in gorgeous graphics *PGA Tour Golf* more than makes up for with compelling playability and instant addiction.

PGA TOUR GOLF: There's nothing quite as satisfying as chipping into the hole from the edge of the green. Well there is, but not in a golf game there isn't.

BEAU JOLLY COMPILATION
■ Beau Jolly ■ 01737 222003 ■ £34.99 ■ *AF36* 95%

C annon Fodder, The Settlers, The Chaos Engine and T2 – The Arcade Game. In one box. Not bad, eh? *Cannon Fodder* – brilliant war game. Little mouse-controlled men shooting other little men. *The Chaos Engine* – tremendous shoot-em-up, a remarkable two-player experience. *The Settlers* – very pretty settling-down-and-establishing-a-society-in-a-fantasy-sort-of-way affair. *T2* – reasonable and darned taxing mouse-controlled out-and-out blast-em-up. A truly great compilation.

90%

AMIGA GOLD FORMAT

CANNON FODDER: Guide your little blokes through oodles of levels in this inspired war game.

THE CHAOS ENGINE: This tremendous shoot-em-up really comes into its own as a two-player game.

Game Busters

Stuck on the rollercoaster of life, trapped in a shooting gallery of emotions? Tough, we're playing *Theme Park*.

If you have a hint, tip or cheat you want to share with other Amiga gamers, write to: Stephen Bradley, GameBusters, *Amiga Format*, 30 Monmouth St, Bath BA1 2BW. And to save our typist's aching fingers, why not send your tips on disk?

THEME PARK
AF63 91%
EA (01753 549442)

£25 Winner!

Thanks to Paul Barrett in Essex who wins a £25 mail order voucher.
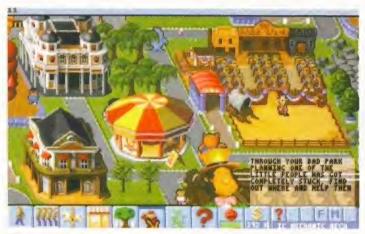
1. The £10,000 prize at the end of the year is important. Here's how you get it. On December 29, take out the biggest loan you can and you'll get the cash for being the richest. Then dispose of the loan.

2. Put a toilet near the exit – this stops people going home just because they need the toilet.

3. Pour money into research. Developing rides, staff training, getting a large warehouse and new shops are the most important.

4. Listen to the advisor carefully, even if he becomes a real pain.

Don't put food stalls right next to rides or the park will be full of puking punters.

5. Don't increase your gate prices by more than 5 per cent a month or folk will complain vociferously.

6. Squeeze rides into a small space – this increases the park value.

7. When the queues get long, put some entertainers near them. If the queues get too long, increase the ride speed and decrease the time. S-shaped queues save space.

8. Put a security guard at the gate to stop spies from stealing your ideas.

9. Thugs can destroy your rides. Place a teddy man in front of the thug and when poor teddy bloke gets beaten up, the security man escorts said thug off site.

10. Create a path (with fences) and a nice lake and employ three handymen to keep the paths tidy.

11. Put shops near ride exits ensuring folk walk past them to earn more money. Employ a handyman for every two shops to keep litter down.

12. The longer and higher your rides are, the greater the chance of winning prizes at the end of the year. Put the popular rides at the front of the park.

13. Snake rides tend to be the most unreliable – they cost time and repair money. Have one mechanic for every

Planning your park wisely and keeping the punters happy is the key to success.

two rides – this minimises repair time. If a ride has smoke coming out of it, close it or it may explode. Don't wait for the mechanic to close it for you.

14. Buy the land at the earliest opportunity – it could save you up to £40K per year. Pay off the loan as soon as you can to save on interest. Also, if you can, buy shares in your own company early in the game because it has huge benefits later on.

15. When your theme park is profitable and all the land is being used, sell up and move to New Zealand where everything is wonderfully cheap.

Continued overleaf →

Snake rides are popular but erratic. Have a mechanic on call.

HELPING HAND

Leaking pipes? Call a plumber. Soggy Yorkshire puddings? Consult a cook. But if you can't get past the bones in *Monkey Island*, you need Steve Bradley.

LEVEL PLAYING FIELD
Please help. I'm stuck on the excellent platformer *Kid Chaos*. Got any level codes?

K Chaos (honest!), Kent

Thanks to Mr Wilson of Blackpool for the following codes.

Level Two – LILBDKEAJNA.
Level Three – NMOHCKGLGAB.
Level Four – EQAOHKRBIAC.
Level Five – PFQOOAICKTN.

Chaos Theory is a technique developed by devotees of a popular platform game.

BANCHEAT
I've been playing *Banshee* for a while now and although it's brilliant, I could do with a hand. Any offers?

Roger Tomkins, Hebden Bridge, West Yorks

You're quite right, *Banshee* is a thoroughly brilliant game. And tricky too. But try this cheat, Roger. When you're on the title screen, type in FLEV17 and then press Return. If the cheat has worked, the screen flashes and lo, you now have infinite lives.

I SPY, FOR THE KGB
I'm stuck at the end of the first chapter in *KGB*. Verto keeps killing me – I know I have to knock him out, but how? This has caused me no end of grief for almost a year now.
P Cunningham, West Kirby, Wirral

When Verto gets to the door, hide behind it and then attack him immediately. Inspect the now (hopefully) unconscious Verto and take the blue piece of paper. Use the camera on it, inspect the resulting photo and then put the blue paper back onto Verto. Hotfoot it to Department P.

MORTAL KOMBAT II

Last month we reviewed *Mortal Kombat II* and included a profile of each of the characters in the game. What we didn't mention was how to achieve their special moves. So here are the fatality moves in all their gruesome gory. Users of two-button joysticks should use the punch key as the Fire button (F).

JOHNNY CAGE

Move	Combination
HIGH SNOT	T A A F
LOW SNOT	A A T A
SHADOW KICK	A T A F
SHADOW UPPERCUT	A A A F
PACKAGE CHECK	(Together) D F
DECAPITATION	(Close) T T D U 3 heads
	A F Tap after Decap
TORSO RIP	A D T T F
PIT SPIKES	A D A F

HIGH SNOT

LIU KANG

Move	Combination
STANDING FIREBALL	T T F
CROUCH FIREBALL	D A F
FLYING KICK	A T F
BICYCLE KICK	F (For 5 secs)
DRAGON	D T A A F (Close)
WHEEL	Block T U A A D Release Fire
PIT SPIKES	A T T F

KNEEL FIREBALL

FLYING KICK

SHANG TSUNG

Move	Combination
1 SKULL	A A F
2 SKULLS	A A T A
3 SKULLS	A A T T A
MORPH	Block A T U Release F
	(Only able to morph into opponent)
SOUL SUCK	Block U A U
DIVE O' DEATH	(2" away) F (For 5 secs)
PIT SPIKES	A A U A F

2 SKULLS

MORPH

REPTILE

Move	Combination
ACID SPIT	T T F
ORB	A A F
SLIDE	Block F F F
INVISIBILITY	Block U U Release F
INVISIBLE KILL	(Close and invisible) T T T F
TONGUE	(Half screen away) A A D F
PIT SPIKES	T T A F

ORB

SLIDE

SCORPION

Move	Combination
SPEAR	A A F
DECOY	A A F
SCISSOR KICK	T U A F
AIR THROW	(Close, both in air) D (Top of jump)
SPEAR SWIPE	(Close) T T T D F
TOASTY TORCH HIM	(At 3") Block A A U U
	Release F
PIT SPIKES	T T D F

AIR THROW

SPEAR

BARAKA
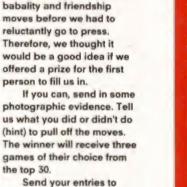
Move	Combination
DOUBLE KICK	(Close) F F
BLADE SWIPE	(Together) D F
BLADE FURY	A A A F
BLUE SPARK	D D F
DECAPITATION	(Close) block A A A Rel. F
IMPALING	(Close) A T A T F
PIT SPIKES	T T A F

BLADE FURY

BLUE SPARK

Sub Zero's chilly Ground Freeze move has stopped Reptile in his tracks. Literally.

KEY

Symbol	Meaning
U	UP
D	DOWN
T	TOWARDS
A	AWAY
F	FIRE

LETHAL COMBINATIONS

One of the maxims firmly stated by Acclaim that *AF* finds a bit hard to swallow (if they are right it means we must be doing something wrong), is their claim that every fighter in *Mortal Kombat II* has a natural winning and defensive combination against every other fighter.

We find that a bit hard, though not impossible, to believe. For example, whenever we played with Kitana or Mileena and took on Jax, Kitana and Mileena were so much faster than poor old Jax that he ended up getting his head kicked in every time and had to go home in a Yorkshire ambulance.

In our book, that's just not fair. So, to even things up a bit, we're asking you to send in various combinations of moves that work against other characters.

The best ones will get published and your altruistic gesture will be noted for evermore in the annals of the mightiest Amiga magazine ever to be published in the history of the Terran Empire.

Send your entries to *Mortal Kombat II* Combinations, GameBusters, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Kung Lao's deadly Aerial Kick has caught Johnny Cage unawares.

MORTAL KOMBAT II

JAX THROAT PUNCH

KITANA

FAN SWIPE	(Together)	D F
FAN TOSS		A T F
SPIN FAN LIFT		A A A F
SQUARE WAVE PUNCH		T D A F
DECAPITATION	(Close) Block	T T T T
KISS OFF	(Close) Hold F	T T D T
PIT SPIKES		T D T F

 FAN SWIPE   FAN TOSS

MILEENA

TELEPORT KICK		T T F
ROLL ATTACK		A A D F
SAI TOSS	(For 2 secs)	F
PSYCHO STAB	(Close)	T A T F
SUCKA	(Close) Block 3 secs
PIT SPIKES		T A T F

 ROLL ATTACK   TELEPORT KICK   SAI TOSS

KUNG LAO

TELEPORT		D U
HAT TOSS		A T F
WHIRLWIND SPIN	Block	F F F
AERIAL KICK	D D (At peak of jump)
HAT DECAPITATION	(Retreat to edge) F (For 2 secs) direct using	D U
SPLIT 'EM IN TWO	(3" away)	T T T A F
PIT SPIKES		T T T F

 HAT TOSS   WHIRLWIND SPIN

JAX

EARTHQUAKE PUNCH	(For 3 secs)	F
GOTCHA GRAB		T T F
ENERGY WAVE		T D A F
BACK BREAKER	(Close, both in air)	D (At peak of jump)
HEAD CLAP	(Close)	T T T F
ARM RIP	(4" away) block	F F F F
PIT SPIKES	Block U U D Release	F

 EARTHQUAKE PUNCH   ENERGY WAVE

RAYDEN

LIGHTNING TOSS		D T F
DIVE ATTACK		A T T
TELEPORT		D U
SHOCKER	(Two-player only) F (For 2 secs)
SUPER SHOCKER	(Close) Block F F F F
SUPER PUNCH	(Close) F (For 3-4 secs)
PIT SPIKES	Block U U Release F

 LIGHTNING TOSS   DIVE ATTACK   SHOCKER

SUB ZERO

FREEZE		D T F
FLOOR ICE		D A F
SLIDE	Block	F F F
PITCH O' DOOM	(Long range) A A D T
	Hold F
SUPER FREEZER		T T D F
SHATTER		T A D F
PIT SPIKES		T T D F

 FREEZE   FLOOR ICE

KEY

U — UP

D — DOWN

T — TOWARDS

A — AWAY

F — FIRE

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SERIOUSLY AMIGA

PHOTOGENICS

AMIGA FORMAT

ART OF THE MATTER

We don't normally have software previews in *Amiga Format*, but we had to break with tradition to give you a taste of the best piece of software we've seen in a long time. *Photogenics* is really revolutionary stuff, so check it out on page 99. Hopefully we'll be able to bring you the full *Amiga Format*, no-nonsense review next month.

In the meantime you'll have to console yourself with this month's latest reviews, including the rather interesting V-Lab Motion — a real-time JPEG video capture and playback system. We're also sounding out a 16-bit samplers, genlock, magneto optial drive and the rather excellent *Wordworth 3.1 SE*.

For those of you still trying to come up with the perfect present for that difficult uncle or aunty – put away the sticky-backed plastic and have a look through our special stocking fillers round-up on page 126.

NICK VEITCH

REVIEWS

There is a revolution coming your way, and **Nick Veitch** went behind the lines to bring back this report.

Photogenics

ith all the software around for the Amiga, the last thing you would think it needs is yet another paint/image processing package. And yet, someone is mad enough to bring out another.

However, it soon becomes apparent that Almathera are not mad at all. *Photogenics*, as they have named the new software, is truly groundbreaking and difficult to pigeonhole into an exact niche of art packages.

It does, like *Art Department Professional*, handle a variety of different file formats. It can be used to compose, scale, and image process images, saving them out in any number of formats. All the loaders, savers and operators are modular, so they can be added as you need them. Unlike *ADPro*, the format of these modules is being made freely available to everyone, so you can write your own or pick them up from the PD.

You can actually paint with the brushes, just like *OpalPaint*.

But *Photogenics* also allows you to edit the pictures with freehand drawing tools. I would say that it was like *Image FX* in this respect, but it is hard to work out what you are doing in *ImageFX*. *Photogenics* is easy. On AGA machines you can see the image in a fully resizable HAM8 window.

Unlike most art packages, you can open multiple documents. This is essential for some of the advanced features of *Photogenics*, such as the Alpha channel and secondary image buffers. The secondary image is used for many of the Rub Through paint modes.

The paint modes are quite special, because they include all of the operator-type effects. So you can actually paint on effects such as Negative, Blur, Solarise and Pixelate. Even more amazing, the paint layer is completely alterable until it is fixed by the user. This means you can undo everything you have painted, or even change the colour, the strength of the effect or the effect itself.

The most amazing thing about the whole package, though, is the price. It is planned to cost just £54.99, making it a damn sight cheaper than almost everything else.

Look out for the full, authoritative review in *Amiga Format*, coming to a newsagent near you soon.

Rub Through is very useful indeed, especially for images that look like you drew them yourself.

PRODUCT
Photogenics

MANUFACTURER
Almathera 0181 687 0040

RELEASE DATE
Real soon

PRICE
£54.99

FROM THE BRAIN TO THE JPEG – PHOTOGENICS IN ACTION

The paint modes themselves are not fixed until you press the Fix button.

Some of the loaders, such as Text, Plasma and Mandel are actually used for generating images.

Brush types and their attributes can be specified in extreme detail.

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V-Lab Motion

Turn your big-box Amiga into a single frame recording video editing system with Nick Veitch.

V-*Lab Motion* is a bit of a progression from earlier versions of *V-Lab*. You may wonder how MacroSystem could improve on their amazing efforts with *V-Lab* Y/C, which, apart from it being fussy about input signals, undoubtedly gives the best quality grabs.

Well, quite simply, what they have done is upgrade the hardware to make it possible to grab supremely excellent quality grabs in real-time, continuously.

This is not the same as the Interleaved Frame Recording (IFR) method from previous versions of *V-Lab*, which required you to replay a section of video tape several times. *V-Lab Motion* grabs at 25 frames per second (fps). It captures and stores 25 pictures every second.

This would be quite astounding on its own, but there is more. Not only does it capture all these frames in real-time, it can also play them back at full video animation speed as well. It is the digital equivalent of a video recorder, except better.

Not only can you record and play back sequences, but once they have been recorded you can play about with them – edit, image process, resequence, delete, loop or just about anything.

The software that makes all this possible is obviously very far removed from the original V-Lab software. MacroSystem have seen fit to call it *Movieshop* (perhaps hoping to pre-empt Adobe creating something similar for the Mac) which I suppose sums it up really.

The software controls how the hardware operates. You can specify a section of the screen to be digitised, and you can specify the JPEG quality level of the image when it is saved out. Both of these factors have a profound effect on the amount of data which needs to be stored – if you have a slow hard drive you will not be able to digitise full frames at 100% quality. In fact, you need a really fast drive to do this.

The card itself relies heavily on a dedicated JPEG chip to allow it to compress and decompress the frames at tremendous speed.

A standard SCSI mechanism running on an A3000 allows 2/3 screen at around 40% quality (which is good enough for most motion work). With the aid of a very fast drive, say a Micropolis mechanism, you should be able to achieve very acceptable results. The mechanisms may cost money, but you can still favourably compare the V-Lab with the PAR or the Macintosh AVID system.

Because of the excellent compression ratio of JPEGs, it is possible to store a lot more data on a JPEG card than you can with the aforementioned Mac system. With a 1Gb drive, you will be looking to get over 20 minutes of recorded frames, instead of

IMPORTING GRAPHICS

It is also possible to import Amiga generated graphics directly into a sequence. This can take some time, because each frame has to be converted into the screen size and JPEG quality settings of your current project, which must remain constant throughout. There is a library which automatically converts the files for you from a wide range of different file formats, but if you have a copy of *ADPro* and a batch conversion utility or script, it is faster to do it yourself.

MPEG VS JPEG

There is a compression method called MPEG which is specifically designed for storing digital video with sound. This is the system used by things like the CD32 FMV cartridge. The advantage of MPEG is that each frame contains only the differences from the previous frame, storing a full frame only a couple of times a second. This results in a smaller amount of data for each frame (or reduced bandwidth to the techies). This means MPEG is able to run directly from even something as slow and inadequate as a CD drive.

Poor old JPEG stores each frame individually, meaning no matter how good its compression ratio, it is still looking at trying to read/write 10 times as much data per second. Why bother?

Well, for the quality of playback, there is very little discernable difference. If you were to freeze a JPEG playback, you may just have a better still frame – big deal. The real difference is on the editing side.

Because each frame is stored individually in a JPEG system, single frames can be resequenced, or even taken away, modified and put back. Because of the sequential nature of MPEG, this is all but impossible because the sequence would have to be regenerated back to the nearest keyframe, a new keyframe added and a new sequence generated to the next keyframe. It can be done, but only slowly and painfully.

At the end of the day, it does make sense to combine your JPEG replay and soundtrack into an MPEG file when you are done with it.

This still frame is from an MPEG Video CD, designed for use with FMV consoles.

This is a JPEG of the same image at a quality ratio of 30%. You would hardly notice...

---

about five minutes. It can make all the difference, and it means that the hardware is a lot cheaper too.

The software itself is still fairly basic, although we are on release 1.2 in the UK. In the usual MacroSystem style, everything has its own window, and all the windows work independently of one another. This is certainly an accessible and easily configurable way to work, but can make the software harder to get into for the first few days.

The main controls are the scene window, and the scene control window. The scene window contains a list of all the

This is a still frame from a sequence. Even with a half-decent camera, the picture quality is very good. This frame was grabbed with a JPEG quality of only 25%.

sequences you have shot so far. Clicking on one of these places it at the command of the scene control window. From there you can view individual frames, cut and paste blocks of frames, or just play through the sequence. Pressing the record button records a new sequence. There are three recording modes: Single Frame, which is very useful for animation; Sequence, which allows you to pre-define a sequence length; or Until Break, which simply records until you click on the Stop button. In essence, it really is as simple as operating a VCR.

The single frame feature is exceptionally useful for animation. Unfortunately, each frame is stored as a

separate sequence. A sequence is however much you record in one go. This can quickly become very confusing, but there is no 'insert recording' or anything as advanced as that. However, each sequence can be easily combined by using the MakeMaster option from the menu, which just creates one long sequence containing all the shots.

You can use the cut, copy and paste commands to edit this sequence, or you can use the timeline to structure all your shots together. The timeline allows effects across two different sequences on playback. You can also chromakey the

Continued overleaf →

This means that your stunning *Lightwave* or *Imagine* animations can be loaded into the system and played back in real-time! One thing you should remember is that you do not need a 24-bit card of

any description – you'll get video quality images directly from the back of the card. This system could be quite easily used to produce promotional videos for your raytracing work or any other form

of animation. Remember though that JPEG was designed to deal with natural tones and colours, so keep the quality level high if you are dealing with large areas of flat colour or high contrast.

This is a single frame grabbed from a sequence, shown at full video pixel resolution. Although it is at 25% quality, it is surprisingly good.

◄ playback with live video, which has some potential uses in multimedia setups.

In practice, it is usually easier to do both. Assemble sequences of reasonable length from a compiled master sequence, then copy it into the timeline.

Because of the nature of the timeline, your little sequences of five or 10 frames are easily going to be lost unless you do this. Each sequence is named, but there isn't room to display the name unless you zoom in or the sequence is a good 30 seconds long.
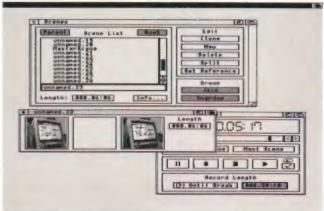
The software is a bit limited, but it is early days. I expect future revisions will be more impressive. The only real restriction to V-Lab Motion is the speed of your disk drive. You won't be able to use this hardware as a professional tool without it, and given the price, it is worth the investment to get a better drive too.

The software follows the same "a window for everything" philosophy of its forebears.

Make no mistake, this is revolutionary hardware, but at the moment it is let down by the software and the hardware restrictions (needing a hugely fast drive).

I would like to think that in the fullness of time this will be an excellent solution, but it can hardly be recommended for professional work at the present time. Given their record of continually updating their hardware and software, I'm sure that it won't be too long before MacroSystem have improved upon this package, and we will be giving it the recognition it deserves in a future issue of *Amiga Format*.

SOUND

The V-Lab Motion card also supports full stereo sound through the MacroSystem Toccata card. Every time you record a scene, the Toccata simultaneously records a stereo sound clip. The sound clips are associated with the video clips, but you can edit them using the Toccata software.

When replaying, the *Movieshop* software automatically controls the sound card and gets it to play the associated sound file. This means that you can get perfect lip-sync recording every time, something which is very difficult to achieve using conventional video equipment.

V-LAB MOTION

DISTRIBUTOR
Amiga Centre Scotland 0189-687 0583

PRICE
£1,040

SYSTEM REQUIREMENTS
Zorroll-slot, hard drive, 2Mb RAM. Very fast SCSI2 drive recommended.

SPEED ●●●●
25fps record and playback. The size and quality of the picture depends on the speed of your hard drive.

MANUAL ●●●
Informative, but nothing special. This package is best learnt by experimentation unfortunately.

ACCESSIBILITY ●●●
As simple to use as a VCR. But difficult to set up to work for your equipment.

FEATURES ●●●
It works, but the editing features are primitive. This should improve with later versions of the software.

VALUE ●●●●
Cheap, compared to other systems such as the PAR (£1,600) and comparable MAC systems (£9,000+).

"Full motion video capture and playback for the masses – but it is not perfect yet."

76%

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Wordworth 3.1SE

It's new, it's special, it gets a big score and it's Nick Veitch. Er, no, it's reviewed by Nick Veitch.
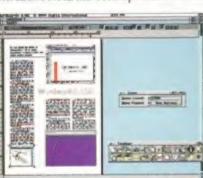
Text effects mean that you can play around with any CompuGraphic font. There are many different effects to use.

This is *Wordworth 1a*. You probably can't tell the difference just by looking, as with many other things in life.

T he seconds are out for the latest round, featuring the all new *Wordworth 3.1SE*, which has trained hard and gone down a weight or two.
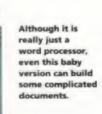
The *SE* version, (*SE* stands for *Special Edition*) is more or less a cut-down version of the full *3.1* package without some of the lesser features, such as tables, footers, EPS support, various text filters and the like. The benefits of this are twofold. First of all the price. *Wordworth 3.1SE* is less than half the price of its big brother – a huge saving.

The second bonus is that the new *Wordworth 3.1SE* has been optimised to run

quite comfortably on a standard A1200 which is a great boon to those of you who have suffered long and hard with your bundled version of *Wordworth 2.0*. The number of disk swaps is very small indeed, even during printing.
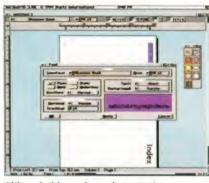
Given that a load of stuff has been taken out though, what can you still usefully do? Well, *Wordworth* is still not only a more than adequate word processor, it is also a word publisher. Multiple column text boxes and full IFF support mean that you can even create documents as complicated as those that make up the pages of *Amiga Format*.

The thesaurus has taken a bit of a beating, but there are still many thousands of words in there, and very useful they are too. Now I can refer to Mr Jones as a futile, ineffectual, paltry, pointless, trifling, trivial, unimportant member of the human race *(not if you want to keep your teeth you can't – Mr Jones)*.
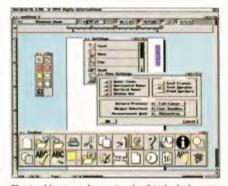
The manual is also a cut-down affair, but still very useful. Bonus marks must go to Digita for their cunning use of the back cover for an icon identification chart (although if they designed the icons sensibly in the first place...).

One thing that is certainly not missing is the speed. Most of these page publishing programs demand so much on processing time that they can't keep up with even the slowest of typists. Although *Wordworth* is never going to take the typing Grand Prix title away from the likes of *Protext* or *Cygnus Ed*, it's no slouch either – even on an A1200 with no Fast RAM.

Dare I say that most users will probably not notice the difference. I'm sure the programmers at Digita will give me a hard time considering all the effort that has

Although this version only supports CompuGraphic fonts, you can still adjust many of the font parameters.

The tool bars can be customised to include your favourite functions, as can the icon sizes and position of the bar itself.

undoubtedly gone into the bigger package, but for the user who just needs to write letters, put together the odd report or create a poster, there is nothing noticeably absent.

Although *Wordworth 3.1SE* has been designed with the A1200 in mind it works perfectly happily on older machines. The only requirements are 2Mb of RAM and Workbench 2.04. so even you die-hard A500+ users can get in on the act.

Although it is really just a word processor, even this baby version can build some complicated documents.

WHAT'S GONE

The *SE* version of *Wordworth* is missing:

- Adobe font support.
- Truetype font support.
- PCX file support.
- BMP file support.
- GIF support.
- EPS support.
- IMG file support.
- Text filters except ASCII and older *Wordworth* versions.
- Table generation.
- Several thousand words from the thesaurus.

WORDWORTH 3.1SE

DISTRIBUTOR
Digita International 01 395 270273

PRICE
£49.95

SYSTEM REQUIREMENTS
2Mb RAM, Workbench 2 or better.

SPEED ●●●●
The cut-down version is still faster than other contenders in this field, but not as fast as text-only programs.

MANUAL ●●●●●
An excellent manual, even if it is a little small. Don't forget the on-line help feature.

ACCESSIBILITY ●●●●●
Some of the icons are a little obscure, but *Wordworth* is still a dream to use.

FEATURES ●●●●
Not quite as gadget-packed as its big brother, but, let's face it, not everybody wants all those features.

VALUE ●●●●●
A bargain. *Wordworth 3.1* may be slightly overpriced, but you can't argue with this version.

"All the best bits of Wordworth 3.1 at a bargain price. This is an offer that's hard to refuse."

91%

Mo-Miga

If a hard disk just won't satisfy your lust for more and more storage space, Nick Veitch reckons you need the Mo-Miga optical drive.

There are two truths of home computing, and in fact all computing. The first is that no matter how fast your system is, it is never quite fast enough (even John 'Pigsy' Allardyce, with his Raptor Plus would agree with this).

The second thing is, no matter how much storage space you have, it is always just a small percentage short of what you actually need. But it's not easy to increase this storage. Unless you are the lucky winner of the National Lottery, you will find that financial shortcomings rather restrict your options.

The best type of mass storage is a hard drive, but they are expensive, unexpandable and if they become damaged, difficult to repair or replace. Mass storage, where files are not in constant use, is best done on some removable medium.

There are plenty of systems to choose from: tape drives, DATs, SyQuest cartridges and magneto optical drives. The trouble with most of these devices is that they are not designed with Amiga owners in mind. They will work, but usually with a considerable amount of difficulty.

But now there is the Mo-Miga – an external magneto optical SCSI device. It takes removable cartridges with a capacity of 1.2Gb. That is not a mistake. A Gigabyte

It's tough, reliable, and pretty fast too. Why not go optical?

(Gb) is 1,000Mb, so 1.2Gb is about 10 times bigger than the hard drive that comes with the A4000.

The beauty of it is that you can buy as many cartridges as you like. The drive is the expensive bit and you only need one of those, but with half a dozen cartridges, you could probably store every file you have ever created or installed.

Usually the penalty of a mass-storage medium is speed, as anyone who has ever used a tape-streamer or SyQuest will tell you. Not in this case. The Mo-Miga is just as fast, if not faster, than the average IDE

Adding a new user to the access list is easy with this simple interface.

drive using a standard filing system (typical performance is in the region of 1.2Mb/sec transfer rate). In fact, Fourth Level have added a few filing systems which provide greater access speeds. This turbowrite mode is useful for continuous filing tasks, such as grabbing pictures in real-time.

Normally removable media are too slow to be used as on-line devices, but the Mo-Miga is exceptionally fast. If you're currently using an IDE drive, you won't notice the difference, believe me. The speeds quoted here were obtained using an A4091 SCSI interface, but it is not necessary to have a fast interface like this.

There is also the financial aspect to consider. Although as it stands, for a 1.2Gb drive, the Mo-Miga works out quite expensive, each additional 1.2Gb (in the form of another cartridge) is very cheap. After X disks, you will find that it is much cheaper per Mb than even dirt cheap IDE drives, and far more convenient too.

The drive is physically large, easily big enough to balance a monitor on, but it is robust too. The exact dimensions for the size-conscious of you with no desk space left are: 41x146x203mm. It can be placed either horizontally or vertically, but not at an angle.

Partitioning the cartridge is easy, but remember to use the right file system.

MO-MIGA

DISTRIBUTOR
Fourth Level 0117 955 8225

PRICE
£2,250 (external model)
£141 per cartridge (5 for £570)

SYSTEM REQUIREMENTS
SCSI interface.

SPEED ●●●
Not super-excellent-bloody-hell-where-did-it-go fast, but faster than a standard IDE mechanism.

DURABILITY ●●●●●
The disks are much more reliable than standard hard drives or tape mechanisms. The unit is robust.

ACCESSIBILITY ●●●●●
There is a minimum set up time for each disk that you format.

FEATURES ●●●●
Excellent security features, and an extremely useful turbowrite mode for specialist applications.

VALUE ●●●●●
For 1.2Gb of storage, you are paying a lot, but if you really need the space, Mo-Miga is worth it.

"The sensible storage medium for large amounts of data made more Amiga-friendly."

87%

CD software

CD-ROM is rapidly becoming one of the big growth areas in the Amiga marketplace. **Jason Holborn**, our resident compact disc jockey, surveys the latest batch of releases to grace his CD drive.

LIGHT ROM
■ £39.95 ■ PD SOFT ■ 01702 466933

If you enjoy 3D graphics work then this CD-ROM title from PD Soft will definitely be of interest. Although it's pitched directly at *Lightwave* users, *Light ROM* contains files which are also useful for *Sculpt 3D* and *Imagine* users. Containing over 650Mb of data, *Light ROM* features a huge library of 3D objects, *Lightwave* scene files, surface attributes, bump maps, *Vista* .DEM files and other associated 3D files.

The range of 3D objects is certainly very impressive. Subjects covered vary from human anatomy and animals (including a great Tyrannosaur model) to effects (various types of fireworks), vehicles and more spaceships than you can shake a stick at. A wide selection of *Imagine* objects are included too and, surprisingly, there's very little crossover so you could use a program such as *Pixel 3D* (*AF65* Coverdisk) to translate between the two formats. In all, *Light ROM* is worth every penny.

> "If you're a keen Lightwave user then you'll find the objects on Light ROM a real treasure trove."
>
> **90%**

17 BIT PHASE FOUR
■ £19.95 ■ 17 BIT SOFTWARE ■ 01924 366982

17 Bit Software have crunched every single new disk that has been added to their immense library of Public Domain software during 1994 on to this single CD-ROM which was mastered by Almathera Systems. Like previous 17 Bit Software collections, none of the programs on the *Phase Four* disks can be accessed directly. Instead, *Phase Four* uses a special menu system which decompresses any disk that you select on to a blank floppy. Although this can be annoying, it does mean that you can easily distribute the PD software on the disk to friends who don't have a CD-ROM drive.

The software on the disk ranges from full-blown PD games to demos, picture slideshows, music samples and utility collections. If you're a PD fan, this disk is highly recommended.

> "The best way to get your hands on the latest programs in 17 Bit's impressive catalogue of PD software."
>
> **82%**

.PCX CLIP ART
■ £19.95 ■ PD SOFT ■ 01702 466933

Aimed primarily at PC owners, this CD-ROM contains a huge collection of high-resolution clip art images for use in desktop publishing applications. Although the clip art files are stored in .PCX format, many Amiga DTP and word publishing packages support the .PCX filetype so there's no reason why you can't use them on your Amiga.

All the images on the disc were scanned in with a hand scanner. Indeed, many of the images have been scanned in line art mode so no attempt has been made to give the impression of greyscales. Although the scan quality is (on the whole) very good, some of the scans are less than perfect. Like all good clip art collections, the range of subjects covered is comprehensive and should suit every requirement.

> "Despite the lack of colour clip art, DTP fans should find this compilation very useful indeed."
>
> **70%**

COMPENDIUM DELUXE
■ £19.95 ■ 17 BIT SOFTWARE ■ 01924 366982

Most PD compilations contain the usual mix of games, utilities and other associated files. What sets one disc aside from the others is not how many animations or utilities it has, but how easy it is to access the files. The author of *Compendium Deluxe* has a rather clever solution to this problem, instead of relying on a fancy front end, *Compendium Deluxe* uses an *AmigaGuide*-based hierarchical menu system that allows you to find the file you want with ease and then decompress it directly on to any device automatically. *Compendium Deluxe* contains a wide selection of serious utilities (many of which aren't on other similar compilations), games, animations and demos. Although the choice of games is not impressive, *Compendium Deluxe* is worth buying for its selection of utilities.

> "Although some of the software is a bit obscure, dig deep and you'll find a few real gems on this disc."
>
> **78%**

.GIF CLIP ART
■ £19.95 ■ PD SOFT ■ 01702 466933

If the thought of wading through thousands of 256-colour scanned images of scantily clad beach babes, high-performance super cars, exotic locations and interesting peices of fruit excites you then this compilation from PD Soft is worth investigating. Designed for the PC, the images can also be viewed on an Amiga providing you have a program capable of interpreting .GIF format images (*Personal Paint* or *ADPro* will do the job).

The images on the disc are arranged into specific catagories – animals, people, transport, girls and so on. Most are scanned in 256-colours at a PC resolution of 640x480 and are of very high quality. As a source of colourful artwork, this disc is very good value indeed. The lack of Amiga support is somewhat annoying but the .GIF format is so widely used that this shouldn't pose too much of a problem.

"If you need a source of high-quality scanned images then look no further than this compilation from PD Soft."

84%

UTILITIES 1-1500
■ £19.95 ■ PD SOFT ■ 01702 466933

Building up a decent collection of PD needn't cost a bomb – buy this single CD-ROM from PD Soft and you can instantly obtain the first 1,500 disks from PD Soft's impressive range of Public Domain software. It doesn't take a brain the size of a planet to deduce that 1,500 disks worth of data won't fit on to a single CD-ROM (you'd need approximately 1,320Mb of storage space) so PD Soft have crunched their disks using the PD *Diskmasher* DMS format. Although DMS is included on the CD-ROM, PD Soft have neglected to include any icons and so you need to be fairly proficient to access the DMS program. Even then, the version of DMSWin (which runs DMS from Workbench) is so old that it's very, very unfriendly. Although the content of this disc cannot be faulted, the presentation leaves a lot to be desired.

"Like Hottest 4, this disc is let down by a lousy front end. Once again, though, the content is very good."

72%

HOTTEST 4
■ £19.95 ■ PD SOFT ■ 01702 466933

The companion to PD Soft's *Utilities 1-1500* disk is *Hottest 4*, a compilation of PD software that didn't quite fit into the serious utilities category catered for by the utilities disc. Like *Utilities 1-1500*, none of the programs on *Hottest 4* can be accessed directly from the Workbench so you'd better have a pretty good knowledge of DMS if you want to get any of them up and running. Once again, PD Soft have managed to make the disc very unfriendly – the only way you can access the contents of the disc is to either use *AmigaDOS* or a directory utility.

However the contents are very good. Packed away on the disc you'll find a vast selection of games, demos (including many AGA versions), Workbench 3.0 and AGA utilities, sampled sounds and loads of music modules. In all, a good compilation that is only let down by its awkward front end.

"The content is top notch but you need to be fairly Shell literate to access what you want."

65%

FRESHFONTS
■ £19.95 ■ 17 BIT SOFTWARE ■ 01924 366982

Font compilations are nothing new – in last month's CD-ROM round up we reviewed two – but few are as cleanly and as logically put together as this compilation from the PD master himself, Fred Fish. Packed on to this single silver wonder are more than 200 fonts. OK, so some other font collections offer more fonts per pound, but this compilation is somewhat different because a great deal of effort has been put into ensuring that every single font is available in DMF, Intellifont, Adobe and TrueType format (saving you the hassle of having to convert them yourself).

If quality rather than quantity is more important to you then this is definitely the outline font disk to buy. It may not have every single PD font under the sun but those that are on the disc are generally very high quality.

"Although not the most comprehensive selection, this is one of the most professional fonts packages."

75%

AMIGA RAY TRACER
■ £19.95 ■ PD SOFT ■ 01702 466933

This two-volume set from Germany contains a potpourri of 3D rendering files. Common to both discs are a wide range of 3D objects for *Imagine*, *Lightwave* and other popular Amiga rendering packages. The range of objects isn't too impressive when compared to the *Light ROM* disc, especially when most of the objects can be found on other compilations anyway. The objects are backed up by a wide range of 24-bit backdrop images, rendered images (mostly *3D Studio* stuff), 24-bit textures, outline fonts and a wide variety of attributes for *Imagine* users. The only major gripe I could level at this collection is that it shows its German origins just a little too much – many of the files are designed for use with *Maxon Cinema 4D* (an English version of which has yet to be released) and many of the file and directory names are in German. Save your pennies and buy *Light ROM* instead!

"Not quite in the same league as Light ROM but, despite a few faults, it's still a good disc."

60%

Aura

With the release of *Aura*, HiSoft hope to succeed where their *Clarity 16* sampler failed. Jason Holborn gets in tune.

Aura connects to the A600 or A1200 via the PCMCIA credit card slot so you can't use it in conjunction with a PCMCIA memory card.

While the rest of the computer industry has painlessly progressed to 16-bit sound hardware, the Amiga's sound capabilities have struggled to break free from the binding limitations of the aged 8-bit Paula sound chip. Paula may have been state-of-the-art back in the mid Eighties but with both Apple Macs and PCs now offering CD-quality 16-bit sound as a standard feature, she is starting to show her age.

With the promised 16-bit sound capabilities of the AAA chip set now on hold, Amiga hardware vendors have tried their best to bring the machine's sound capabilities kicking and screaming into the 16-bit age. SunRize were the first company to dip their toes in the 16-bit sound market

Aura can sample in 12-bit resolution either into one of eight windows (sample buffers) or even direct to hard disk.

with their brilliant *AD516* card, closely followed by products such as *Toccatta* and *WaveTools*. Although these certainly give your average *SoundBlaster* a run for its money, they all fail in one major area – price. The *AD516* costs about £700 and you wouldn't get much change from £350 for *Tocatta* or *WaveTools*.

When you consider that a 16-bit PC *SoundBlaster*-compatible card can be picked up for around £100 or less, the rather high price tag of Amiga 16-bit sound cards is almost laughable.

Microdeal tried their best to remedy the situation with the launch of *Clarity 16*, an external 16-bit sampling cartridge that connected to any Amiga model via the parallel port. Although the sound quality of *Clarity* could not be faulted, it failed to sell in large numbers and therefore never achieved the widespread software support that products of this type demand.

Learning from these early mistakes, HiSoft are back with a vengeance with *Aura*, a 12-bit sampling cartridge designed for the A600 and A1200. Not only is *Aura* about £50 cheaper than *Clarity*, but HiSoft have also ensured that it is supported by at

least one major music product prior to its launch, meaning that low-cost CD-quality sound could finally become a reality on the Amiga.

Aura is one of a growing number of hardware products that connects to an A600 or A1200 via the much under-rated PCMCIA credit card slot. Unfortunately, this means that you can't use *Aura* along with a PCMCIA memory card (or indeed any other peripheral that uses this slot). A1200 owners are unlikely to find this much of a problem, but if you've got an A600 you're likely to be less than impressed because it effectively means that you're limited to a maximum of 2Mb of Chip RAM (a sizeable chunk of which is taken up by the *Aura* sampling software) which limits the maximum size of your samples considerably.
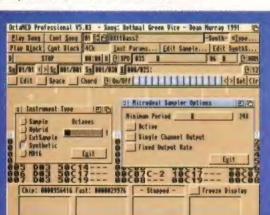
Although the case design leaves a lot to be desired (HiSoft are still using the same one for MicroDeal's *AMAS* sampler), the *Aura* hardware is impressive. Running along the rear of the *Aura* unit are six phono connectors which collectively form the entire range of input and output connectors that *Aura* requires to function.

The first of these – the Left and Right Input connectors – are pretty self explanatory. Like all samplers, *Aura* uses these for the input of a stereo sound signal (from a CD player, microphone or whatever) from which it can sample.

Next up we have a set of two phono connectors labelled Left and Right Output. Because *Aura* doesn't use the Amiga's own sound capabilities, these two connectors are used to relay the sound from *Aura*'s own sound generators to a TV, monitor or even an external amplifier.

The two connectors labelled Left and Right Amiga provide *Aura* with the one feature that every Amiga sound card should have – a mixer that combines the output from *Aura* with the Amiga's own sound. What this means is that, when used

SOFTWARE SUPPORT

One of the main stumbling blocks of any new device is software support. Indeed, it was the complete lack of software support that killed off *Clarity 16*, HiSoft's earlier 16-bit sampler package. Not surprisingly, HiSoft have learned from this mistake and at least one *Aura*-aware package will be available by the time *Aura* hits the shelves.

Version 5.03 of RBF Software's *OctaMED Professional* has been written to take advantage of the cartridge's impressive sound capabilities, so you can write music with *OctaMED Professional* that uses all four channels of Amiga sound plus an extra channel of 12-bit *Aura* sound. OK, so it doesn't sound too inspiring but for such things as vocal samples and warm sounds such as strings and pad sounds, this extra channel of 12-bit *Aura* sound comes in very handy. What's more, *OctaMED*'s sample editor is also fully 16-bit aware so it too can edit *Aura* samples.

A special 12-bit version of RBF's *OctaMED Professional* has already been written to take advantage of the *Aura*'s enhanced sound capabilities.

REAL-TIME EFFECTS

One of the most fascinating aspects of the *Aura* sampling software is its impressive range of effects which can be applied either to the current waveform in memory or even to the incoming sound source in real-time. These effects range from the usual echoes and cross fades to metallic (a phased effect), modulate (oscillates the sound), bounce (stereo bounce) and tube (a metallic echo effect).

OK, so effects are nothing new – HiSoft's own *StereoMaster* sampler and other rival samplers offer similar ones – but HiSoft have upped the stakes with the introduction of mixed effects. These are expanded effects that are built up by combining two effects – phased reverb, echoed modulation and so on. Although these new mixed effects offer nothing that couldn't be achieved by applying a combination of single effects, the added convenience and scope for experimentation is welcome.

Real-time effects are jolly useful too because you can use *Aura* as an effects unit for a synthesizer or other musical instrument. Most synthesizers used by professional musicians have banks of effects built in to them to 'fatten' the sound. Using *Aura*'s real-time effects, you can achieve similar results without having to splash out on dedicated and expensive professional effects units.

Add all manner of effects to your sounds using both standard and mixed effects such as echoes, modulation and phasers.

◄ with software that supports *Aura*, you can take advantage of both *Aura*'s and the Amiga's sound capabilities simultaneously. HiSoft get top marks for this feature alone.

Aura isn't, as many people originally believed, a pure 16-bit sampler. Although the *Aura* sampling software processes samples at 16-bit resolution, the sampling hardware digitises and replays samples at 12-bit resolution. Surprisingly, however, the difference in sound quality isn't that noticeable, especially if you're used to the quality of budget 16-bit samplers such as *Clarity 16*. That said, don't expect *Aura* to sound anything like an expensive Akai sampler – these £1,000 plus dream samplers boast some very expensive filters that just aren't present in cheaper units.

Bundled with Aura is a comprehensive sample editing program that enables you to capture and replay 12-bit samples, clean them up, modify and generally mess around with them. Modelled on just about every other sample editor available for the Amiga, *Aura*'s version can capture your samples in mono or stereo with the waveform being displayed graphically in the main window.

As with any sampler, the first thing you'll want to do is to grab a sample. The maximum sample rate offered by *Aura* depends very much on the speed of your machine. On my 030-based A1200, *Aura* was able to sample at a maximum rate of 61.72KHz. Quite why anybody would ever want to sample at such a high rate is beyond me – even professional samplers don't go above 48KHz simply because the human ear can't hear such high frequencies. Sampling at anything above 48KHz is just a complete waste of memory but at a much more sensible rate direct from CD *Aura* produces exceptionally good quality samples.

Unlike many samplers, *Aura* enables you to work on more than one sample at a time. Although you can only edit one sample, up to eight can be held in memory and you can flick backwards and forwards between them simply by selecting the appropriate window.

What's more, these samples don't have to be 12-bit. *Aura* happily loads and converts between 8, 12 and 16-bit sample resolutions. Which means that you can sample at a higher resolution and then knock the sample down to 8-bit for use in

Aura provides a wide range of editing tools which can be used to clean up any rough and ready samples.

non-*Aura* aware packages which give better sound quality.

Aura certainly isn't the be all and end all of Amiga sampling technology (SunRize's *AD516* still wears that crown) but, for the price, it still represents very good value for money. Just like all of the other non-standard Amiga samplers on the market, the success of *Aura* rests on software support. Although HiSoft have persuaded Teijo Kinnunen into producing an *Aura* version of *OctaMED Professional*, it won't really take off until packages such as *Music-X* and *Bars & Pipes Professional* can support it. The problem is that other software vendors are less likely to jump on to the *Aura* bandwagon until HiSoft manage to shift large quantities.

If you put the issue of software support, or lack of it, to one side, you are left with a capable and well-designed sampler that, while not quite in the same league as the more professional units, certainly leaves standard Amiga 8-bit samplers for dead (yes, even *AudioEngineer*). The wide range of editing tools and special sampling effects that *Aura* provides are some of the best available.

Until Commodore (or whoever eventually gains control of the Amiga) decide to produce a 16-bit Paula chip, *Aura* is the best sampler available for the A1200 and A600.

AURA

DISTRIBUTOR
HiSoft 01525 718181

PRICE
£99

SYSTEM REQUIREMENTS
A600/A1200 only.

SPEED ●●●●
Sample editing is very rapid indeed. *Aura*'s sample editor is one of the quickest on the market.

MANUAL ●●●●
Like all HiSoft manuals, the *Aura* manual is well written and very easy to follow.

ACCESSIBILITY ●●●●●
If you've ever used an Amiga sampler then you'll have no problems getting to grips with *Aura*.

FEATURES ●●●
The *Aura* sample editor can't be faulted but *Aura* really needs more than just two sound channels.

VALUE ●●●●
Not cheap when compared to 8-bit samplers but *Aura*'s sound quality is definitely worth the extra money.

"Aura is a very well-designed and great-sounding sampler that should do very well."

84%

Lola L1500

Jason Holborn lifts the lid on Lola's new L1500, the first genlock to make use of the company's new custom video chip.

The new L1500 genlock from Lola is a breakthrough in budget genlocking.

The prices of Amiga genlocks may have tumbled faster than the popularity ratings of the Conservative Party but the genlocks themselves have changed very little. Although modern genlocks now have fancy sliders and faders, professional video wipes and all manner of new wizardry, the electronics responsible for encoding and keying the video signals that pass through the genlock are virtually unchanged.

Lola have taken perhaps the first major step forward in genlocking technology for many years with the launch of their new L1500 genlock, an entry level composite-only genlock based around their new 1452-01 custom chip which – Lola claim – provides the genlock with features previously only to be found in units costing many times the price of the L1500.

Like all Lola's genlocks, the L1500 won't win any awards for design, although it's a vast improvement on their previous efforts. The L1500 may feel clunky but it's robust.

The fascia has two sets of controls – three mode buttons (used to switch between keying modes) and two sliders which provide progressive dissolve and fade control. These two sliders have a smooth action, allowing you to fade your titles in and out without any sticking or jumping. The three mode buttons are better than the usual push-button-style controls too because they have a positive (yet not heavy) click to them, plus a built in LED that shows which button is selected.

The L1500's connectors are a joy to behold too. At the rear of the genlock are the usual RGB input and passthru connectors plus two BNC bayonet-style connectors which are used to feed the live video signal to the genlock and the keyed output signal to your destination video deck. If you'd rather use phono connectors, Lola include two BNC-to-phono adaptors at no extra cost.

The most interesting connector of all, however, is a little 9-pin D connector which allows you to connect a chromakey to the L1500. Lola's new sub-£200 L1550

ChromaKey can connect directly to this port and allows you to create weird and wonderful blue screen effects along the same lines as Roctec's successful RocKey chromakey.

Connecting up the L1500 is easy and getting started is even easier. Feeding the genlock a composite signal from a Panasonic Nicam video, the results were very good – dot crawl was minimal and colour bleeding non existent. Better still, the L1500 is the only genlock I have ever used that can overlay titles on to a paused video signal (normal genlocks lose sync when the live video signal is paused).

The L1500 isn't the best value genlock around – GVP's S-VHS compatible G-Lock is at the top of the tree – but the L1500 still represents a genuine breakthrough in budget genlocking technology. Lola claim that an S-VHS version of the L1500 will be released soon and so it would make sense to wait for this genlock if you need S-VHS compatibility. If you can get by without it, however, buy the L1500.

SUPER CHIP FACTS

The heart of the L1500 is Lola's revolutionary new 1452-01 custom genlocking chip, a super slab of silicon that gives the L1500 features normally found only in professional broadcast quality genlocks. Here's a taster of its many talents.

Enhanced Horizontal System: Maintains the composite encoded output from the Amiga even when no live video signal is fed to the genlock.

Digital Delay Compensation: Provides much better quality keying of the Amiga's graphics on to the live video source, giving sharper picture quality.

Non-standard Signal Locking: Allows the L1500 to lock to non-standard video signals such as the output from domestic VCRs when in fast forward, rewind or pause modes.

Vertical Offset Correction: Removes the six-line vertical jump typical of all other Amiga genlocks when the video input signal is removed.

Non-Interlaced Locking: Locks to non-interlaced video signals such as the output from other computers and security cameras.

L1500

DISTRIBUTOR
Lola Marketing 01858 880182

PRICE
£176.25

FEATURES ●●●●
With selectable key modes and a full range of fade options, the L1500 is very well endowed.

MANUAL ●●●●
Short but to the point, the L1500's manual is clear and easy to follow.

ACCESSIBILITY ●●●●●
Thanks to the L1500's logical design, most video fans could probably set it up with their eyes closed.

VALUE ●●●●
Not the cheapest genlock available but – as the old saying goes — you get what you pay for (and then some!).

"Lola's new L1500 is the best low-cost composite genlock available for the Amiga."

90%

NEXT MONTH IN AMIGA SHOPPER

COMMODORE – THE REAL STORY

In the next issue we will be taking a long hard look at the rise and fall of Commodore. Where did they begin? Why did they fail? Where are the people who built the Amiga now? What are the real facts behind the liquidation of Commodore International? When they make the film "The Decline and Fall of the Commodore Empire", who will play Medhi Ali? Dan Stets (of the Philadelphia Enquirer) finds out what really happened to the big C and where the people that made it happen are now.

Amiga Shopper – it's more fun than dropping your enemies into a shark-infested bathtub. Don't miss it!

On sale Tuesday 3 January – £2.50

SUPPLEMENT AHOY!

Want to find out what this Amiga Shopper business is all about? Turn to page 131 for our special 16 page supplement: The best of Amiga Shopper 1994

Stocking fillers

Can't work out what to buy the Amiga in your life for Christmas? **Jason Holborn** provides a sackful of festive suggestions.

FOOT MASSAGER
£19.95 ■ Golden Image ■ 0181-900 9291

The Amiga may be the friendliest computer ever invented but is your working environment ergonomically friendly? If not, then this foot massager from Golden Image is just the thing for those long, hard gaming sessions. While you're fighting to save the universe, rest your feet and feel all your stress and tension disappear.

COMPUTER OPTICS SPECTACLES
£32.99 ■ Gepro ■ 01689 851206

Protect your eyes from the harmful effects of monitor radiation with these trendy specs from Gepro. Modelled in lightweight black plastic, Gepro claim that their specs protect your eyes from ultraviolet light and electromagnetic radiation (even if the rest of you still gets fried).

INKJET REFILL
£6/£11 ■ Abcon Computer Services ■ 01708 751211

Inkjet cartridges are terribly expensive and so this inkjet refill kit from Abcon Computer Services is a great way of saving your pennies. It's available in two forms – mono (£6), or colour (£11). The refill kits include everything you need to refill the ink cartridge of just about any make of inkjet printer.

ERGOSTICK/TAC 30 JOYSTICKS
£17.99/£10.99 ■ AF Mail Order ■ 01225 822511

Give Kitana a good kickin' and beat the living daylights out of Baraka with one of these two joysticks from *Amiga Format*'s own mail order peeps. They are just the ticket for getting those high scores. The Ergostick is an ergonomically designed soft joystick that sits comfortably in the palm of your hand while the Tac 30 is a more traditional helicopter-style joystick.

SCANNER & MOUSE PAD
£9.95 ■ Golden Image Ltd
■ 0181-900 9291

This combined scanner pad and mouse mat is the ideal present for scanner-owning Amiga users. It provides a quick and easy method of scanning images without having to worry about keeping the scanner in a straight line. It also helps to anchor the page that you're scanning as well as providing a smooth surface for both your scanner and mouse.

CLOCK CARTRIDGE
£17.99 ■ AF Mail Order
■ 01225 822511

Due to reasons known only to Commodore, not all Amigas feature a battery-backed clock, a little device that lets your Amiga date stamp files so that you know when they are updated. This great little clock cartridge is the answer. Simply plug it in to the parallel port of your Amiga and run the included software.

CD32 COMPETITION PRO
£19.99 ■ AF Mail Order
■ 01225 822511

It's a well known fact that the CD32's own hand controller isn't the most comfortable gamepad around. Modelled on the Sega Mega Drive's gamepad controller (far more comfortable), the Competition Pro gamepad is fully CD32-compatible. Boasting all the CD32's various buttons, the Competition Pro also features turbo and autofire controls for every button.

VGA ADAPTOR
£15 ■ Power Computing
■ 01234 273000

If you own an A1200 or an A4000 then you can use this handy little VGA adaptor from Power Computing to connect any standard 15-pin VGA monitor to your Amiga. Alternatively, it can also be used as a replacement for Commodore's own adaptor bundled with the 1940 or 1942 monitors – should they decide to give up the ghost.

MOUSE AND MAT
£12.95 ■ AF Mail Order
■ 01225 822511

The Amiga's own mouse is a fairly sturdy fellow but he's not going to last forever. When that sad day of his demise comes, this bundle consisting of a high-quality mouse and an easy-to-clean mouse mat is the ideal present for the Amiga in your life. The mouse, which can be used on both the Amiga and an Atari ST, has two micro-switched mouse buttons and high-resolution running gear.

AF VIDEOS
£14.99 (each) ■
AF Mail Order ■ 01225 822511

If the Christmas telly just isn't to your liking then why not settle down in front of the gogglebox with one of *Amiga Format*'s excellent videos? Each video has been expertly produced by our own team of techies to bring you the most in depth videos available. Whether you're a seasoned expert or a beginner, you'll find our videos concise and very easy to follow.

The best of '94
AMIGA
SHOPPER

A selection of the best articles, reviews and other bits from the world's premier serious Amiga magazine...

AMIGA SHOPPER

Welcome to the best of Amiga Shopper 1994! In this special 16 page edition, we have picked out some of the best stuff from the last 12 issues of Amiga Shopper, the world's best serious Amiga magazine.

Over the next few pages you can see what you've been missing if you haven't picked up a copy of Amiga Shopper recently. We cover all aspects of Amiga use from DTP to video via programming and 3D graphics. However, there is one thing that you won't find in Amiga Shopper – games. We do not (and will not) cover games, except in the sense of how to write your own. So if you want tips on how to do the fatalities in Mortal Kombat II, we suggest you look elsewhere.

Anyway, have a look at the sort of thing that you will find in the magazine, and don't forget where to come if you want to get serious with your Amiga. You'll be welcome (as long as you bring your own beer).
Cheers,

Richard Baguley
Editor

Check the calibre of our reviews with our review of the SX-1.

Amiga Shopper brings you previews of all the good stuff. Check out our first look at the revolutionary Digital Broadcaster 32.

CONTENTS

Want to find out which PD utilities are the best? Check out our acclaimed PD section...

Shock Horror! We even review animations and the like in our PD pages!

COMING SOON

Amiga Shopper is the world's premier technical Amiga magazine. Every month we take a look at what is happening on the serious side of the Amiga scene with articles and features such as:

THE AMIGA SHOPPER SUPERTEST

Every month, we take one area of Amiga use and look at every available program or product in this area.

Over the past few months we have looked at: music programs, A1200 accelerators and RAM cards.

Over the next few months we will be looking at: programming languages, modems, printers, samplers and a whole lot more.

It's simply the best way to find out what's hot and what's not for your Amiga.

AMIGA ANSWERS

Got a problem with your Amiga that you just can't crack? Need to know how to do something but can't find the answer?

Every month we carry page after page of your Amiga problems solved by our team of Amiga experts. Between them they probably know more about Amigas than is healthy to admit. If you've got a problem, get the answer with Amiga Answers.

TUTORIALS

Knowledge is power. Which is why we run regular tutorials on Comms, AmigaDOS, Video, DTP and a range of others.

Why do we do this? So that you, the serious Amiga user, can get more out of your Amiga.

REVIEWS

With some of the most knowledgable Amiga experts on board, we can bring you the final word in reviews. Our reviewers are ruthless in their perusal of the latest Amiga hardware and software.

We don't take the manufacturers' promises and reprint them. We don't review things from a press release. We take the products and pull them apart to see what makes them tick. If you want to know what a product is really like, we're the dudes to ask.

Get serious with your Amiga. Get Amiga Shopper! On sale on the first Tuesday of every month.
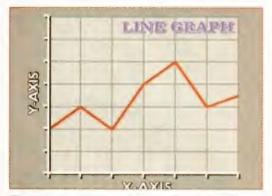
GRAPHOLOGY

You too can make your presentations look great – Gary Whiteley shows you how to animate graphs for that professional look.

This month I'm going to take a look at animating graphs for presentations. You might think that this is a bit too specialised for you and that you'll never need to make any presentations which include graphs, but read on anyway because some of the techniques involved can be applied to other types of animation. I'm going to use two main tools – a paint program and a presentation program, in this case *Deluxe Paint IV* and *Scala MM300*, though other paint programs (for instance *Brilliance*) and other multimedia software (eg *MediaPoint* or *Adorage*) could be used instead, though with a few slight modifications to the method.

POINTS TO CONSIDER
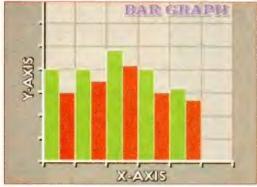
As with most computerised presentation work the

There are many types of graph, though the line...

...and bar graphs, along with the pie chart and...

...their variations are probably the most common.

first rule is KISS – Keep It Simple, Stupid. Why? Because getting the viewer to quickly understand what is being shown to them can prove difficult if too much information is crammed on to one screen. The idea of a presentation is to provide easily absorbed, at-a-glance details which can later be backed up by an information pack, brochure etc and there's no need to go over the top when designing the actual screens which will be shown. Keep the colours clear and simple. Use backdrops which enhance the presentation, not swamp it.

If you can't see the wood for the trees, the purpose of the presentation will be lost. Use fonts which are both easy to read and which reflect the style of the presentation you are making. Don't use cyberpunk fonts when dealing with a blue chip company (unless they approve and the fonts fit the context). Use fonts which will be easily readable from the desired viewing distance – which generally means using point sizes of 18 or more on a hi-res interlace screen. Bigger fonts are better in most cases, though it will depend on what colour the text is and how it works against the background.

Do use a background if you can, because a plain screen just doesn't have the pizzazz offered by a nice-looking *Scala* background, for example. A carefully chosen background should set off the foreground material – in this case our graphs – so it should be interesting, yet not overbearing. Dark hues will probably work best because they allow us to produce the graph (which is the main information pertinent to the presentation) in lighter hues which will be easily and quickly digestible.

DESIGNING THE GRAPH

The first thing you need to do is to sit down and analyse exactly what it is that your graph animation has to achieve. It is likely that it will be part of a larger multimedia presentation and, if this is the case, it should be designed with the overall style of the presentation in mind. Unification and 'corporate identity' is important.

Stick to a few particular fonts and graphical styles to ensure that each part of the presentation has at least some visual linkage to its preceding and following segments. Don't chop and change the way that each screen is presented and laid out too radically, unless you are moving into a completely new chunk of the presentation, or you may well confuse your audience instead of informing them. Look at the type of data that you are going to present and decide what kind of graph to use. Will a bar chart, pie chart, scatter chart or line graph work best? How much data will fit on to

one screen (but remember not to overcrowd it).

Ensure that each graph is annotated with a title and name, and that the axes or segments of the graph are clearly labelled, otherwise the viewer won't be able to grasp what the graph's content is all about. If you can't fit all the data easily on to one screen, consider using several screens one after another, and work out just how you will get from one screen to the next with the least amount of disturbance – through some kind of transition perhaps. This is where our presentation program comes in handy, because it can be used to make the transitions between sections much more straightforward. If you're just using a paint program the likelihood is that you'll just combine the animations one after another with maybe a momentary cut to a background in between.

With a presentation program like *Scala MM* there is much more scope for being creative and hence providing more variety for the viewer to keep their interest up. Perhaps the best way to visualise how the data will be presented is to do some rough sketches before you start committing the artwork to your Amiga. Imagine how the data will look on screen. What scales will you use for the axes (if any), and what kind of graphic presentation will be most easily understood by the viewer?

GETTING TO WORK

I'm going to make two kinds of graph – a line graph with several sets of data and a bar graph with just one set. If you watch the main news programmes on TV, you'll often see these kinds of

Start by constructing the graph's axes, allowing room for any text that will be required – labels, titles, logos etc.
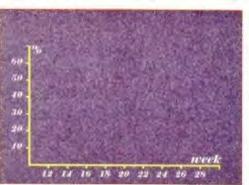
graph (or variations of them) when elections are held, or there have been some new unemployment or economic figures released. I say variations (such as bar graphs built of coins) because TV stations use some very sophisticated software and equipment to get their presentations on to screen.

However, one night, as I was watching *News At Ten*, I realised that I too could do at least some of these effects quite easily on my Amiga, even if I couldn't exactly match the high-quality graphics that British TV generally seems to excel at. Accordingly, I knocked up some quick screens in *DPaint*, loaded them into *Scala MM300* and set up a couple of transitions. Voila! – a line graph sequence which draws itself on to screen and is far more interesting to look at than one which just sits there doing nothing.
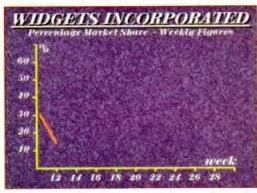
So how do we go about making such things? First decide on the background you are going to use. You could produce this yourself or use an existing one. Just ensure that it is fairly unobtrusive (whilst still being interesting), uses dark hues and, if you have a non-AGA Amiga, is composed of no more than eight colours – you'll need the rest for the graph and text.

It should also be hires interlace format and, if possible, in overscan. Load the image into your paint program so that you have the correct palette to work with and then flip to the spare screen so that you can get to work. If necessary clear the spare screen to palette colour 0. A note of caution to *Scala HVT* users: *HVT* can only use eight colours, so it will probably be better to sacrifice the background altogether as otherwise you

Animating a graph with a paint program is much more time-consuming, as each frame of the animation has to be prepared by hand – but it is possible. Here are just four frames from a ten...

...frame sequence. Save the resulting sequence as an animation and then play it back to check that the graph builds up correctly. Then go to the first frame, swap screens, load the background...

...image you chose at the start, swap back and merge the background behind all the animation frames. Check the playback once more and save the completed animation.

almost certainly won't have enough colours to produce the graph, text *and* a background. But feel free to experiment anyway. Why use hires interlace overscan? Because it looks crisper and it will fill the screen, whether it is output to video or displayed directly to a monitor. If you use a non-AGA Amiga, don't worry that you can only use 16 colours maximum, because that's usually plenty for most jobs like this. We're going to make a line graph which shows the percentage of two products' market share over a period of weeks.

Start by drawing the axes. Y (the vertical axis) will represent the percentage, whilst X will chart the week by week progress. I know from examining my raw data that the maximum Y figure will be 60 per cent, whilst the minimum will be 0 per cent, so (bearing in mind that we want to title and name the graph and have room to label the axes) set up a 10x10 grid to make it easier to accurately draw straight lines and align the labels correctly.
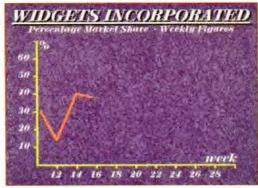
A slight repositioning of the whole graph framework might be necessary to get the right visual balance, so pick everything up as a brush and place it where it looks best, remembering to

Draw in the data for the two sets of figures by using the line tool (making sure that the grid function of your paint program is active).

Don't forget to add a key so that the viewer understands what each line represents.

leave enough room for the title and name, as well as any company or other logo which might be required. Then add the title and name text. Stand back from the computer screen and make sure that all the text is easily readable.

If you're going to export the graph into a presentation program (*Scala MM*, for instance) you might find it easier to save the blank graph and then load it up in that program and add all the text there, because it will be easier to do fancy things like shadows, underlines and so on. When you've finished laying out the basic framework save the whole image as an IFF file and load it back to *DPaint* (if you've been adding the text elsewhere).

Now we're ready to start drawing in the actual data. Because I have two sets of data to represent on the graph I'm going to use two separate screens – one for the first set of data and the next showing both sets. Make sure the grid is active in *DPaint* and select the line tool and a large square brush. Draw the first set of data (make some up if you don't have any handy!) on to the annotated graph in a distinctive colour, making sure that it corresponds with the intersections of the two axes properly.
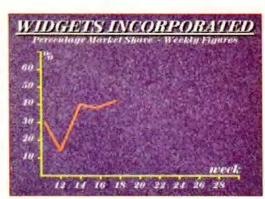
Then, add a short description to denote what the line represents and save the new screen with a new name. Next add the second set of data (in another colour), add a new description for it and once again save the image with a new name. We now have our two basic graphs, both without backgrounds.

What we do next depends on the method we will use to animate the graphs. The simplest method is to use a left-right wipe in a presentation program like *Scala* to progressively wipe between our three screens – the 'blank' graph, then the first set of data, followed by the second. If this is your preferred method then we must first return to *DPaint* and add our chosen background to each of the graph screens by loading it into the spare page, swapping back to the graph image and choosing the 'merge in back' command, saving each new page under its original name as it is created. If not, we'll come to animating the graphs with our paint program a little later.

Next run *Scala MM* and load the graph screens in sequence. Set up the left-right wipe transition (called Wipe East) for each image and run the script, using the mouse to advance the presentation to the next screen as required. You

Now you've learnt how to do a line graph, try your hand at doing a bar graph similar to this one.

should see each set of data appear as if it is being drawn across the screen. and there you have it! Experiment with other transitions if you like to see what other effects can work successfully with your graphs. If you don't have *Scala MM* then life is rather more difficult.

The simplest (and least elegant solution) is to simply make a *DPaint* animation which flips from one graph screen to the next and activate it manually. But this combination won't look too flash. A more elegant, but much more drawn out and memory-hogging method, would be to make each line of the graph draw itself on to screen in sections, using a technique called Scratchback. Scratchback involves modifying a single completed image to make a series of frames, each with progressively less of the image shown in each frame. The easiest way to do this is to determine how many frames of animation it will take to do the graph sequence, based on the number of data points that your graph consists of – plus an extra frame for the initial blank graph.
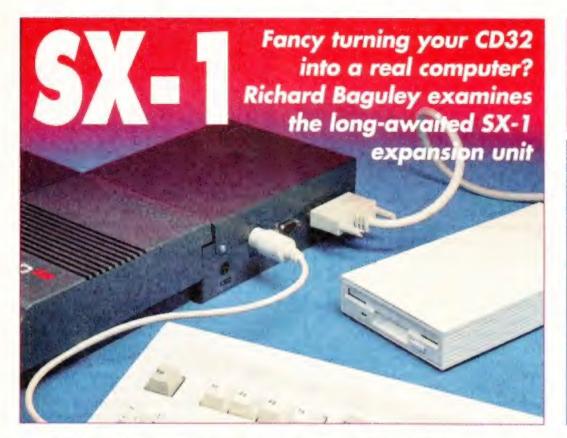
To do the scratchback load the final frame of the sequence (the one where the graph is complete), set the number of animation frames required and then go to the last but one frame. Remove the last portion of the graph line (the section which is furthest to the right), then go back another frame, remove the last two portions and so on, until you reach the first screen, which should have no graph line on it at all when you've finished. If you have more than one data line to draw you'll have to add this sequence after the first section is complete and repeat the procedure described above to animate it. That's it! Without a presentation program it's obviously much harder to make an animated graph, but it *is* possible.

Now it's your turn. Try animating a bar graph (here's a tip if you use *Scala MM300* – draw the bars using the rectangle tool and then use individual bottom to top wipes to make each one appear to grow). Work out different ways of getting the result you require within the limits of your particular Amiga hardware and software, though bear in mind that some things may well not be possible if you don't have the right setup.

Watch for graphs on TV and try to emulate them with your Amiga. As I said at the start, graphs may not be your thing, but the experience you gain from animating them will come in useful for other projects you may be called upon to do. **AS**

SX-1

Fancy turning your CD32 into a real computer? Richard Baguley examines the long-awaited SX-1 expansion unit

INTERFACING

The SX-1 adds the following ports to the CD32:

Serial – a 9 pin male socket (A 25 pin socket is fitted to the A1200).

Parallel – a 25 pin female socket.

RGB Video – a standard Amiga 23 pin male socket.

Floppy Drive – standard Amiga 23 way female Socket. Can be used with any standard Amiga drive (although power supply limitations mean that you shouldn't plug more than two drives).

IDE – two hard drives (one internal 2.5 inch model and one external) can be fitted to the SX-1 as required.

Keyboard – an IBM AT 101 key style keyboard can be fitted via the SX-1

Audio Input – combines another audio source with the CD Audio output.

T here's no doubt the CD32 is a success, but a lot of people want more. Once you've played a few games, you want to get further into the fascinating world of computing. Only it's a bit difficult to get very far with only a CD32 controller to point the way ahead...

The SX-1 unit is designed to turn a CD32 into a "near A1200" (according to the PR handouts that accompanied it). This means adding a floppy and hard drive interface, a keyboard and the various other ports on the back of an A1200. For a full list of the ports the SX-1 offers, see the box headed "Interfacing".

Hardware-wise, the SX-1 is not particularly inspiring, but it does fit in well with the CD32. The off grey box is colour matched to the CD32 and extends about seven and a half inches behind the CD32. It plugs into the expansion slot, and has an MPEG through port, allowing you to fit an FMV module. A nice bit of design allows you to still have the FMV unit inside the CD32, keeping everything looking nice and tidy. On the other three sides of the SX-1 are the interface ports, Using all of them gives rather a rat's nest of leads, and I also noticed that the RGB

A CD-ROM drive, a floppy drive, an IDE hard drive – what more could a boy wish for... or girl, for that matter?

socket (on the left hand side of the unit) was a bit of a problem when the monitor required a sliver adaptor, as it got in the way of the CD32 power socket. Apart from that, I really can't fault the external look of the unit. A switch to disable the expansion ports (except for the RGB, keyboard and memory) is fitted to the back of the box.

Inside the box, the SX-1 is composed of a single PCB. In the middle of this is a single SIMM socket, which can give up to 8Mb of extra Fast RAM. However, you should note that fitting an FMV unit will cut this down to 4Mb due to the fact that

the FMV card grabs a chunk of memory space for its own use. A 2.5 inch IDE hard drive can also be attached to the bottom of this card. A set of six jumpers allow you to set the amount of memory fitted and to test the memory. Two of the jumpers allow you to slow down the boot-up process, which is extremely useful if you have a hard disk which does not spin up quickly. A real time clock (with lithium battery) is also fitted.

Although a keyboard can already be fitted to the CD32, Paravision have decided to add the option to use an AT 101 key style keyboard as well. This is an extremely good idea, as this style of keyboard is very cheap (typically around £40-50). The only problem comes with the Amiga keys, as these obviously aren't present on a PC keyboard. These are re-mapped on to the F11 and F12 keys, which are not present on a normal Amiga keyboard.

All of the expansion ports use the standard Amiga devices, so any program should be able to access the serial and parallel ports. I tested the serial port by downloading a file from a BBS using a V Fast Class modem, and the serial port had no problems handling a data speed of 28,800 bits per second. The parallel port was tested using the Liana networking system, and once again I did not come across any problems. The keyboard emulator is also completely hardware based, so it should work with any program, no matter how much it bashes the metal.

So what would it cost you to turn your CD32 into an A1200? The SX-1 itself costs £199, and a floppy disk drive will cost you around £40, and a keyboard will cost you around £50. Assuming that your CD32 cost you the usual sum (around £250), this gives a total of around £650. Contrast this

with the typical cost of an A1200 (£330 for a desktop dynamite pack), and you can see that there is a pretty significant difference. To be perfectly fair, the SX-1 setup will be able to display FMV (which the Amiga 1200 with CD-ROM drive won't), but there are relatively few other benefits over an A1200.

This unit will certainly appeal to those who have a CD32 and don't want another machine cluttering up their table, but it's a pity that adding functions such as disk drive and keyboard are so expensive. Although it's not cheap, it certainly fits in flawlessly with the CD32 and makes it (more or less) into an A1200.

There is also a certain feel-good factor about being able to watch Video CD movies on your monitor, and this may also prove important for home movie makers, as the signal can be genlocked. The only omission is a PCMCIA slot, and that isn't much of a loss. I dare say that this piece of kit will find its way into many a CD32 owners' hearts, but I really can't see an A1200 owner defecting because of it. **A⑤**

CHECKOUT
PARAVISION SX-1

Design 85%
It's a pity the sockets could not have been a bit better arranged, but it fits in with the CD32 very well.

Expandability 90%
Allows you to add peripherals, such as a modem, to a CD32 while still watching Video CDs.

Value 80%
It's certainly more expensive than buying an A1200, but it's not bad value considering what is built in.

Overall Rating 85%
It's not a cheap solution, but it does turn your CD32 into an A1200. What more could you want in life?

Non-linear future

Gary Whiteley gets a sneak preview of the first Amiga non-linear video editing system.

Digital Broadcaster 32 is a Zorro III card which works in either an accelerated A4000-030 or A4000-040.

With non-linear systems increasingly looking like the future of video editing I visited White Knight Technology to get a demo of AMI's *Digital BroadCaster 32*, the first non-linear editing system for the Amiga to actually hit the street. Here's an account of what I saw. This isn't a review, because, firstly, it hasn't been possible to get my hands on the full kit for a long enough period to give it a good testing and, secondly, because there are still slight adjustments being made to the software, although the unit *is* now ready to rock 'n' roll.

Digital BroadCaster 32 is a Zorro III card which works in either an accelerated A4000-030 or A4000-040. It features real-time onboard hardware to compress and decompress video streams to and from hard disk to give instant random access to any stored frames, or playback video clips instantaneously in any quality up to full-spec broadcast. You might be thinking that the *DBC 32* is just a variation of DPS's excellent PAR system, and you'd be right – up to a point. However, what makes the *DBC 32* different is that its main function is as a non-linear video editor, which means that any of the clips which have been grabbed from video to the *DBC 32*'s dedicated hard drive can be arranged for instant playback in any chosen order, and trimmed to fit, just like 'real' video editing, only with fingertip control and no waiting for tapes to spin up and play back.

Video input and output is via an external breakout box which has connections for composite, S-Video and component (Betacam) video inputs and outputs, as well as connections for the two standard time codes (LTC and VITC) and CSync output. *DBC 32* offers a wide range of image quality, depending on the compression ratios chosen when the video clips are digitised.

By using time code to make an Edit Decision List (CMX format) the program can be rough-cut on the *DBC 32* and then 'on-lined' in a conventional edit suite to achieve full video quality. This type of low-quality editing is useful when the programme will be a long one and it would be cheaper to on-line the finished product (typically, only 12 minutes of broadcast-quality video can be stored on a 2.1Gb hard drive).

For shorter programmes, such as adverts and pop promos, there's no need to take this route because it should be possible to fit the required

We will be doing a full review of the Digital Broadcaster 32 as soon as we can get hold of one

clips on to the hard disk, edit the programme with the *DBC 32* and output the finished product direct to tape for delivery – even at full broadcast quality. For the technically-minded, the *DBC 32* fulfils CCIR 601 and 4:2:2 digital video standards and outputs 720 x 576 pixel overscan images in PAL. It also works in NTSC.

FLEX YOUR MEDIA

MediaFlex Producer, the software which drives the *DBC 32* and controls all the functions of the *DBC 32* – from digitising and compression ratios to editing and playback. It appears to be fairly simple to use, with clips being dragged, or cut and pasted, into position. Although there is no on-screen representation of the clips as there is with some other non-linear systems (licensing this idea from the copyright holders would be too expensive for AMI) each clip can easily be displayed on a video monitor as it is called up, and clips can be tagged with descriptions to keep track of them more easily. Trimming clips for accurate editing is easy, while the stored clip remains unaffected in any way. Only the playback reflects the changes made to the edit.

With some extra work and software A/B roll editing with transitions is possible, though from what I gathered during the demo this is rather time consuming at the moment as all the transition frames have to be processed before the transition can take place. Upcoming versions of the *DBC 32* promise to speed up this process considerably.

WHAT ABOUT SOUND?

DBC 32 can link up with an optional hard drive and Sunrize Studio 16 card, or a dedicated new 32-bit Zorro III card, to provide simultaneous CD-quality audio digitising and playback along with video. Sound clips can also be edited just like video clips. As well as being a non-linear editor the *DBC 32* can also be used for recording single frame animations and time lapse recording.

During the demo I must say that I was very impressed with the quality and performance of the *DBC 32*, though there are still some areas of the software which could do with improvement. For instance, there is no drive defragmentation routine available to reorder the data on the storage drive, so when the drive starts to fill up fragmented files slow down the transfer rates, which could be a problem at broadcast quality.

Another thing – *DBC 32* only works in fields. This is fine for absolute quality, but not always necessary and at the moment there's no option for switching between fields and frames. No doubt these problems will be ironed out and the *Digital BroadCaster 32* will go on to achieve the success it deserves. Even at around £8,500 (ex-VAT) for a complete audio/visual system, the *DBC 32* compares very favourably with other (non-Amiga) non-linear edit systems. **AS**

NON-LINEAR EDITING – WHAT IS IT?

In traditional video editing segments of video are copied from the source tapes to the edit tape. The trouble is, tapes are linear, so if you want to access a sequence that's 45 minutes into the roll, then you have to wind the tape on until you get there.

With non-linear editing you still have to wind the tapes, but only until you've transferred the required clips to digital computer storage. Once on digital disk, the compressed data can be randomly accessed and a non-linear editing system can be developed. The data can be organised and edited directly on the computer screen, with instant playback of any part of the show.

Once edited, the programme can be output directly to videotape for distribution or an Edit Decision List (EDL) can be generated from any time code supplied with the digitised clips and the original tapes then taken into a conventional edit suite for mastering, effects etc. Non-linear editing saves time previewing edits and reduces wear and tear on precious master tapes. Because it is digital, the quality out is as good as the quality in – even at broadcast quality compression ratios.

NO PROBLEM!

Every month, we take your Amiga problems and solve them. In every issue we set our team of experts a simple task: to take the problems that our readers have and find a solution.

Sounds simple? Well, the problems we solve in Amiga Answers range from the simple to the highly complex. We've taken a selection of the best from last year for this special issue. If you have a problem that needs solving, you'll find the question form in every issue of *Amiga Shopper*.

Our team certainly know what they are talking about. Between them they have amassed many years of Amiga use: **Mark Smiddy** knows all there is to know about AmigaDOS and floppy drives. **Jeff Walker** is our desktop publishing, fonts and printer correspondent. **Gary Whiteley** is a trusted expert on video applications and graphics. If you have a query about comms, we'll set our guru **Dave Winder** on the case. **Toby Simpson** is our code clinician. If you've got problems with anything from C to assembler, try taxing his little grey cells. Finally, we've got a man you can rely on when it comes to operating systems programming – **Paul Overaa**.

Have you got a problem? You know where to come...

AT TRICK

GENERAL When I use the Shift key with the 2 key to get double-quotes, I get an @ character shown on the screen. Is this just my A1200? Can I fix it as I can't use many of the commands in GFA-BASIC?

Alexis Vallance
Chatburn, Lancs

You have American selected as the Keyboard Type in the Input preferences editor. You need to select the British keyboard type. *Jeff*

TWO INTO ONE

MONITORS Am I unique amongst Amiga users in that I want to connect two display devices to one Amiga? I have an Amiga 1200 which I use for WP, DTP and the odd game and I have it hooked up to a Philips 8833 MkII monitor. Alongside the A1200 I have a 21" TV which has an RGB input via a SCART connection. I found it easy to obtain the relevant leads for each monitor, but my troubles began when I wanted to connect the two together so that I could switch from one to the other without having to unplug and swap leads. Because of eyesight problems I prefer to use the RGB on the 21" TV as the larger size makes it easier for me to cope, but there are times when I want the TV on whilst I am using my computer, so then I need to use the Philips monitor.

The biggest problem is that the RGB connections are at the back of the A1200 and because of the way I have my system set up it is not very accessible – plus continual plugging and unplugging is not recommended. The simple answer seemed to be an adaptor box with a 23-pin input and two 23-pin sockets for the outputs, preferably switched.

Despite trying a number of dealers I have been met with blank stares because not only are they unable to supply such an adaptor but it seems that I'm the only person who has ever asked for such a device.

Surely there must be others who want to connect two monitors to their computer and if anyone is already doing it, I would be glad to hear their tips on how to do it. Equally, I would be glad of any advice you can offer, or if you could point me in the direction of a suitable manufacturer. I should also add that I haven't even been able to find a dealer who can sell me 23-pin connectors.

Brian McMahon
Corby, Northants

No, you're probably not unique Brian, though I'd hazard a guess that you might just be something of a rarity.

Let's look at a few possible solutions, since I'm pretty sure that the kind of switching device you're looking for probably isn't (and never has been) available anywhere in the known universe.

Perhaps the simplest solution is to build yourself a 23-pin to 23-pin extension cable (or get someone else to do it if either your eyes or your soldering aren't up to it). This way you could at least access the RGB signal easier, even if it isn't switchable, and because the Amiga end remains firmly in place, you won't need to worry about straining the RGB socket. But don't forget to switch off your Amiga before changing the cables over.

And before you remind me that you can't find 23-pin plugs and sockets, try calling Videk (☎ 081 204 6690) and ask them if they've got any because they had when I called them in late April and, as far as I am aware, they've supplied them for at least the last five years.

A second possible solution would be to get hold of a switched SCART splitter box and connect your Amiga to this, then plug in a pair of suitable leads (SCART to SCART for your TV and SCART to 9 pin D-connector for the 8833) to feed the monitors and switch as necessary. Try flicking through a few camcorder or video magazines to find a supplier for such a SCART switcher or call Trilogic on ☎ 0274 691115 and they'll sell you one for around £17 including P&P. If you need special leads making up to go from SCART to the 8833, then ask Trilogic about this – they make leads up too. *Gary*

BJ OR DJ?

PRINTERS I am using *PageSetter3* with my A1200 and Star LC-20 printer. I want to upgrade my printer and am thinking of buying either the Canon BJ-10sx or the Hewlett-Packard DeskJet 310, which has a colour option. Which of these would you recommend, or any other for around £200. Colour would be nice, and I'd use it just for structured clip art – I don't expect photorealistic quality.

M R Sutton
Swansea

Sounds like you've already made your mind up to me. If you want colour then the DeskJet 310 is certainly the best value option around at the moment, although you will have to invest in *Studio Printer Software* (£50) to get a proper driver and support for the features of that printer that Workbench does not support. You should keep in mind that colour printing is a more expensive pastime than mono printing – ink costs are more, media costs are more (the wet ink does not print well on to ordinary bond paper), and colour pages take three times longer (or more) to print than mono ones.

The Canon BJ-10 has proved to be a very popular mono printer indeed, and it has stood the test of time. Also in its favour is the fact that you can get a disk of Amiga drivers and support programs free from Canon. Rather then dive straight for the BJ-10sx, investigate the BJ-200, which features much faster and much better printing technology than the BJ-10sx, and is selling for under £300. *Jeff*

GOING INTO BUSINESS

HARDWARE I am going to use my A4000/030 (2+8Mb, 80HD) as the basis for a business venture and would much appreciate your help. The Amiga will need to be connected to three chained SCSI devices: a flatbed scanner; a large external hard disk; and a removable storage disk of some kind, probably an optical disk or SyQuest. Can I simply connect the above devices and set their SCSI IDs, or do I have to remove some resistors?

I want to treat the removable media as a PC format device. Commodore gives an example in the Workbench 3 manual of altering the mountlist for CrossDos to do this for a SyQuest. If the manufacturer does not provide Amiga drivers, could I easily design a new mountlist entry for another SCSI device like a 1.3Gb optical disk? Are there any good books on this subject?

What Amiga software drives SCSI scanners? I'm interested in the Epson GT-6500, and especially the HP Scanjet IIcx. What software is best for cleaning up large, 16-greys scans?

Lastly, does ProPage 4.1 give reasonable WYSIWYG of large scanned images (A4, 300 dpi, 16-greys) on a 640 by 512 16 colour screen so that I can get a good representation of what my final output will look like? I don't want to resort to graphics boards or slow 256-colour AGA. Is ProPage capable of dealing with black and white A4 documents that contain well over 250Mb of scanned graphics data?

I know you are probably thinking at this point "Please go to your local Apple dealer straight away and get him to slap you around the head with a couple of PowerPCs", but there is method to this apparent madness.

Paul Field
London SW18

I'm not thinking that at all, although the DTP task you describe may need more memory than you

currently have. We'll get to that in a bit, first SCSI.

You don't have an SCSI interface with the A4000, so your first stop is to buy one. There are various options, and the absolute best advice I can give you is to approach a single Amiga dealer to supply you with the SCSI card, the large external hard disk, and the removable storage device.

A reputable dealer will ask plenty of questions to ensure that he is supplying you with exactly what you need, and he will be able to help you with any installation problems you may have, including writing mountlists if necessary. When you buy from a reputable Amiga dealer you don't need good books on the subject.

Before spending your money, ask the dealer if he is prepared and able to provide you with this sort of after sales service – if he isn't, then shop elsewhere. Brian Fowler Computers ☎ 0392 499755 would be a good place to start.

One fact I should prepare you for is that to format a hard disk or removable disk as PC format

you will require version 5 of CrossDos. The version which comes with the Amiga is an earlier version of CrossDos which can format floppies as PC disks, but that's all. However, if the removable media is already PC formatted (at work, by a friend...), the version of CrossDos which comes with the Amiga is fine for reading and writing to that media.

On to the second of your questions. The Epson GT scanners are the best supported flatbed scanners on the Amiga. Alas, there is no Amiga software which drives an Epson GT scanner via a SCSI interface, so you'll have to plug it into your parallel port. While this isn't quite as fast as driving it via SCSI, it works well.

However, if you want a printer plugged in as well you'll have to get a switch box or multiport card that is fully wired for bidirectional parallel data transfer. The best one-stop Amiga software for scanning and retouching scans is ImageFX. Many users prefer the ASDG scanning software that goes with ADPro, but ADPro is

useless for retouching.

Now then, this is where we get to the possible memory problem I mentioned. For greater processing accuracy, image processing and flatbed scanning software will hold greyscale data internally in 8-bit format, even though you may be displaying it in 16 greys.

A 300 dpi A4 scan will be around 2500 by 3500 pixels; at 8 bits per pixel this calculates to 70 million bits of memory required to store the image data, which is approximately 8.5Mb.

As you have just 8Mb of expansion memory, there is no way you are going to be able to scan (or load) such a large image unless you use virtual memory. *ImageFX* has built-in virtual memory support – it's data caching really, which doesn't require an MMU so will work on the A4000/030 – but you'll find that while you may be able to accept the decreased scanning speed, it will be frustratingly slow to work with when retouching. Your only realistic options are to buy more memory (another 8Mb to be comfortable) or to scan at a

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SERIOUS DTP FOR WOULD-BE PROFESSIONALS

DTP

As I intend to get seriously involved with Amiga-based professional desktop publishing, I'm in desperate need of some suggestions and advice.

1.) What is the minimum configuration, hardware-wise, for a professional Amiga-based DTP set-up?

2.) Is the Amiga capable of being connected directly to a typesetter or imagesetter? Are these PostScript-compatible devices?

3.) What are the processes involved concerning 4-colour separations? Can it be done on the Amiga, outputting to a mono PostScript laser printer, or should I definitely always use an output bureau?

4.) How am I going to transfer files to an output bureau? SyQuest removable hard drive? Floptical? Magneto-optical?

5.) Can you propose a complete and viable professional solution for Amiga-based desktop publishing?

Steve Siopoulos
Athens, Greece

OK, Steve, I will answer all your questions, but before I start, let's get one thing straight – if you imagine that setting up a professional desktop publishing system based around an Amiga is going to be cheap, then get your head out of the clouds, because it isn't.

It certainly can be done more cheaply than on other platforms, and to almost the same high standard (the Amiga lacks one or two bits of specialised software, most notably an Amiga equivalent of

Adobe Photoshop or MicroGrafx's deeply wonderful *Picture Publisher*), but it is still going to cost a few thousand pounds.

1) The *smallest* Amiga you require is an A4000/030, but an 040 would be much, much better because it is much, much faster. You will be best off with at least 1Gb (one gigabyte) of hard disk storage space because typical desktop publishing files – 24-bit graphics, PostScript fonts, clip art, documents, templates and so on – consume a lot of disk space. Fitting a large drive like this will require purchasing a SCSI controller card (which you'll need for other things anyway; for fitting a CD-ROM drive for example), and if you want the drive to run quickly, as quickly as it will have been designed to run, then you will require a proper SCSI-2 controller as opposed to a cheap SCSI-2 compatible controller, which will be a SCSI-1 controller that understands SCSI-2 commands, but cannot execute them at the same speed.

You can cut down your storage space requirements (get away with a smaller hard drive) by regularly backing-up to floppy or tape streamer, but this is time consuming and, in the professional world, time is money. Only you will really know which will be the best trade-off.

You require at least 18Mb (eighteen megabytes) of memory because typical desktop publishing tasks require acres of the stuff. The more memory, the better. I have 26Mb and still run out of memory at times, forcing me to use the *GigaMem* virtual memory program, which gives me more memory, but slows processes down. And not

everything will work with virtual memory.

You will almost certainly require a flatbed colour scanner, and you will definitely require a PostScript mono laser printer on which to proof your work – mistakes will prove very costly if they are discovered by the output bureau.

Lastly, you will definitely require a decent multiscan monitor – 17in or larger would be best. Trying to desktop publish professionally on a TV set or cheap monitor is like trying to draw with a fine pencil on a brick wall – you can do it if you really stick at it, but it is going to take you time to become an expert at it, and everyone who passes will laugh at the sad plonker who doesn't understand that fine pencil strokes show up best on fine art paper. As most decent multiscan monitors do not sync down to the Amiga's 15.6 KHz refresh rate, the most professional option may be to buy a *normal* multiscan monitor and fit it to a graphics card like Retina or Picasso II, which will also of course enable you to work with true colour 24-bit graphics on the screen. (That's the route I took.)

2) Yes, you can connect an Amiga to an imagesetter if you really need to, but it will be much more convenient for both you and the output bureau if you simply give them your PostScript files, which the bureau will then download straight to the PostScript compatible imagesetter or other device.

3) The 4-colour printing process is an extremely complex subject. There are such a vast number of variables involved that it is much, much easier for the inexperienced desktop publisher to get it wrong,

than it is to get it right. Consequently you would be better off taking advice from your output bureau regarding screen angles and densities, undercolour removal, page sizes and much more.

There is absolutely no replacement for experience in this area, and you can learn a lot by experimenting with output to your PostScript laser printer.

At a pinch you could get away with producing your own separations on film on a 600 dpi laser printer, but the results are not going to be comparable to those you see in the books, magazines and leaflets all around you. For full colour, you really need the higher resolutions that imagesetters offer.

Both of the Amiga desktop publishing programs (*PageStream* and *ProPage*) are able to produce 3-colour (CMY) and 4-colour (CMYK) separations, as well as mechanical or *spot* colours.

4) How you transport the files to the bureau will depend on what format that bureau is willing to accept them in. Most bureaus will accept SyQuest cartridges, but some will accept only Mac-formatted SyQuest cartridges, which means fitting a Mac emulator to your Amiga.

Alternatively, many bureaus will accept data down the phone line, which is a much more convenient way to do it – and, with a fast modem, it is nowhere near as expensive as it might at first appear to be. If the files are not large, you could transport them on MS-DOS format floppy disks, of course.

5) Certainly. My consultancy charge is £100 per hour, plus expenses. (What's the weather like in Athens at the moment?) *Jeff*

I JUST CAN'T GET TO GRIPS WITH...

DEM BONES

SOFTWARE

I've been using *Imagine 3.0* for a few months now, after two years of using the previous version, so I wouldn't say that I'm a stranger to the workings of 3D software.

But there is one important feature of *Imagine 3* that I just can't get to grips with. The Bones feature!!

Honest to God, I've read that section of the manual more times than I care to remember and I still can't make head nor tail of it. Just one of the inadequacies of the manual I think...

Would it be possible for you to print a Bones tutorial for *Imagine 3* in *Amiga Shopper* some time? I think that there are a whole lot more people than myself who would appreciate it!
Jonathan McBrien,
Drumclay, Fermanagh

I can certainly sympathise with your difficulties Jonathan, because I had pretty much the same trouble when I tried to follow the manual and find out how bones work. Eventually, after a lot of fiddling, the penny dropped and I realised how
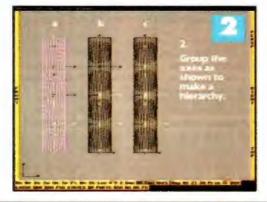
Bones work. So here is a simple tutorial to show you (and any other lost soul out there) how to get started with Bones.

It must be said that the procedure can be a bit complex and labour intensive, but there's no easy way to do Bones, so follow the tutorial closely and you shouldn't go wrong.

1 The first thing you need to do is open *Imagine's* Detail Editor. Then add a primitive tube with the following dimensions: Radius 20, Height 200, 24 circle sections and 4 vertical sections. Make the top and bottom ends closed. This will be our basic object to which we will add bones and then make them move.
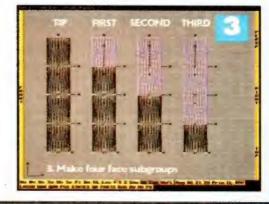
Next we must add a series of axes to represent the bones. In our example we need to add three axes altogether, one for each section of the tube. Think of the division between each section as a joint. Position each axis centrally in the tube (this should be at X=0, Y=0), with each one level with one of the three vertical section dividers. In the example the Z positions for the axes are 50, 100 and 150 respectively.

2 To make Bones work correctly we need to group them hierarchically to the parent axis of the tube object. Do this by holding down a Shift key, selecting the tube object, then the lowest Bone axis (Z=50), and group them together (Right Amiga g). The axis at Z=100 must then be grouped to the axis at Z=50, and the axis at Z=150 grouped to the Z=100 axis.

What you are essentially doing is mimicking a bone structure like the one in your arm. The parent axis represents the shoulder, to which the arm is attached. The other axes are like the elbow, wrist and first set of knuckles, each joined to the last and moving when its parent joint moves, as well as when the joint axis itself moves. By grouping the Bones like this you have made a hierarchical group.

3 We now need to make a series of face subgroups for the Bones to connect to and influence the movement of. This is probably the most awkward part of the whole Bones procedure to grasp, and the example in the *Imagine 3*

1. Make a sectioned tube. Add three new axes as shown.

2. Group the axes as shown to make a hierarchy.

3. Make four face subgroups

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lower resolution.

Now *ProPage*. When run in 16-colour mode, *ProPage 4.1* reserves just four greys for displaying coloured and greyscale bitmaps – that's black, white and two shades of grey. The other 12 colours are reserved for the user interface and for displaying structured drawings and fonts in colours. This 4-greys representation is normally good enough to see what the bitmap is and to position it or put words on top of it or whatever, but it is certainly not WYSIWYG.

You cannot really blame *ProPage*, it is a simple limitation of working on a 16-colour screen. If you want a better WYSIWYG display then you can flip to 256-colour mode, then flip back to black and white or 16 colours to continue work.

For display purposes, *ProPage* holds bitmap data internally in only as many bitplanes as the screen mode. So in 16-colour mode your single 300 dpi A4 scan will consume about 4Mb of memory. I don't know where you get your figure of "250Mb of scanned graphics data" — keep in mind that a bitmap's filesize bears no relation to the memory it will consume; that's decided by the depth and pixel dimensions of the bitmap – but if we say you want 10 different A4 300 dpi scans in the document, then you will require about 40Mb of memory to hold them all in RAM.

Naturally this is asking too much, so you will have to keep all the graphics "hidden" — which means you will load and position them one at a time, but before loading the next one you will first

"unload" the previous graphic so that *ProPage* can free the memory that graphic is consuming. On the screen you will get a rectangle with a cross through it. Naturally you may reload the graphic at any time, provided you have enough free memory of course.

At print time you may require even more memory because the real bitmaps (as opposed to the quick display representations) are loaded into memory again from disk. Printing in Greyscale mode will use 4 bits per pixel (for the whole page, not just for bitmaps), printing in Colour mode will use 12 bits per pixel.

ProPage 4.1 has a feature which enables printer data for bitmaps to be cached temporarily to hard disk, which will enable you to print the kinds of massive bitmaps you want to work with without having to buy megabucks of memory, but you may find that this cache will need to be set to 50Mb or more if there are many large bitmaps on your pages.

Naturally you must first ensure that at least this amount of free space is available on the hard disk. This is for "preferences" printing by the way – printing to a dot matrix printer using a Workbench printer driver. If you are outputting to a PostScript device you will not require a lot of memory in the Amiga for printing as the pages are imaged in the printer's memory, not in the Amiga's memory.

So you see the platform you are using is only a small part of the solution. The A4000/030 is just as capable of doing what you want to do as is

a PowerPC, though not as quickly without some speed-up hardware, but the bottom line, as it is on *any* platform, is memory and storage space. *Jeff*

TINY MIND BLOWN

SOFTWARE

My PowerScan 3 uses all the available memory in my A500 (2.5Mb total) and I have no trouble when it comes to manipulating the images. However, when I load the scanned images into Deluxe Paint II I keep getting "Out Of Memory" messages.

Is there any paint package (preferably one including some basic image processing) which uses fast RAM instead of only Chip RAM? Or is there any software available that can be used with DPaint to make it use fast RAM?
N. Wood
Rickmansworth, Herts

I think you'll find that Deluxe Paint II (like almost every well written program) uses any memory it can get its pixels on – which means both Chip and fast RAM. My best guess at solving your problem is that either your RAM could be faulty or that your images are just too big to display successfully with DPaint and your current memory. Remember that DPaint also needs RAM to run, and it is unlikely that your Amiga will have less free memory after DPaint has loaded than when you were running the PowerScan software.

Otherwise, there should be no problems. Years ago, when I was running DPaint II on a 1.5Mb
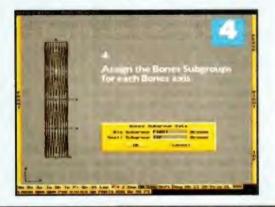
...BONES IN IMAGINE 3

manual doesn't explain this part at all well. What will happen is that two subgroups will be 'attached' to each bone, one subgroup which will move the furthest during the bone's manipulation and the other which will move the least. It's easier to show how to do it than describe how it works!

Think of the tube as a finger (admittedly with an extra joint). When the joint at the top of the finger moves the fingertip moves much further than the joint itself. The same holds true for each of the other joints. Bones simulates this hierarchical motion.

We need to make several face subgroups, so do the following: Select the tube object. Go into Pick Face mode (Right Amiga 5). Then select the Drag Box pick method (as opposed to Click), hold down a Shift key and drag a box out around the faces which make up the upper closed end of the tube. Now select Make Subgroup and call this subgroup TIP. Next select all the faces between (and including) the tip and first joint of the tube (working from the top down).

Use Make Subgroup again and call this subgroup FIRST. Then select everything from the tip to the second joint (where the Z=50 axis is). Call this one THIRD. You can actually use any names you like, of course, but maybe you should stick with these for now.

4 To get the Bones to work we have to attach the subgroups to them in a very specific order. Pick the uppermost axis (Z=150) and then select Bones Subgroup from the States menu. A requester will appear. In the upper text field type FIRST (don't forget to press Return after entering the name). In the lower text field enter TIP. This process sets the sphere of influence for the first bone. Click OK on the requester.

Move to the next Bone and enter SECOND in the upper field, FIRST in the lower one and click OK. For the third Bone down (Z=50) enter THIRD and SECOND respectively.

5 The next step is very important. Pick the tube object and then select States. Create a new State (call it DEFAULT) and make sure that Shape and Grouping are both selected.

Click on OK. Save the grouped object (Right Amiga 1) as BonesTest.bon.

6 Now comes the fun bit. Remain in Pick Group mode (right Amiga 1) and select a bone (try the third one down) in the Front view. Rotate it a little (right Amiga r) around the Y axis. Rotate other Bones if you wish. Then select the parent object (the tube) and select Bones Update from the States menu. You should see your object snap to its new, deformed, position.

You could now create a new State for this position (call it FIRST, perhaps) and save the object again. Ensure that Shape and Grouping are selected when you make a new State. Test out your States with State Anim. When you come to set up an animation in the Action Editor just make sure that you set the correct object State for each part of the animation.

And that's the basic method for making Bones. Modify the basics by using more axes and divisions for a smoother look.

I hope I've helped you figure it all out now. *Gary*

4. Assign the Bones Subgroups for each Bones axis

5. Create a new State and ensure that Shape and Grouping are selected.

6. In Group mode rotate some bones. then use Bones Update to reform the tube

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Amiga 1000 I could still produce 70 or 80 frames of hires interlaced animation in up to 8 colours, though often I would run out of memory and have to split an animation into several parts.

The solution? – either add yet more memory, or continue to work within the frustrating limitations of your current Amiga setup. *Gary*

WHEN *WILL* THEY LEARN?

MONITORS I hope you can help me. I purchased a second-hand Philips ViewData Information Terminal 2 monitor (Type 311310866540) and I have tried everywhere to get a lead for it but no-one can help.

I found a shop which was prepared to make a lead up, but I don't have a manual for the monitor and nobody could tell us the connections. I called Philips in Croydon, and another place called VisTec – but to no avail. Could you help us to get a lead?

Could you also tell me how much the manuals for my A600 would be, as mine were stolen, along with some other things.

Mrs Paula Warriner
Folkestone, Kent

I'm sure this will end in tears, Mrs Warriner, because I reckon you've probably bought a turkey. Your query is one which I regularly get – "I bought a second-hand monitor, but I can't get it to work with my Amiga". Well, you *might* strike lucky, but buying an unknown monitor without a manual is a

big gamble, no matter how cheap the monitor is. There are so many different types of monitor available nowadays, but relatively few of them which work with the Amiga.

Call Philips again, tell them what you're trying to do and make sure that they don't give you the runaround. Ask to speak to someone in a technical department concerned with computer monitors – they may actually be at another location so be prepared to call elsewhere. Have all the relevant serial numbers, model and other details ready and be patient!

It isn't Philip's fault that you've bought a monitor which might not work with your Amiga. I'm sure they'll try to help you if they can, but I wouldn't be too hopeful about getting a successful result if I were you.

As for the manuals, call Commodore on ☎ 0628 770088 and enquire there. *Gary*

NEW AMIGA, NEW PROBLEMS

VIDEO My query is in regard to using two video titling programs – Broadcast Titler 2 and ProVideoPlus – on my new A1200. Both programs used to work fine with my A500 but now I've got problems.

When I boot using the ReLocKick disk I can get BT2 to boot with no problems but if I install it on my hard drive I am instantly confronted with the font requester page and that's where it sticks. What's going on here?
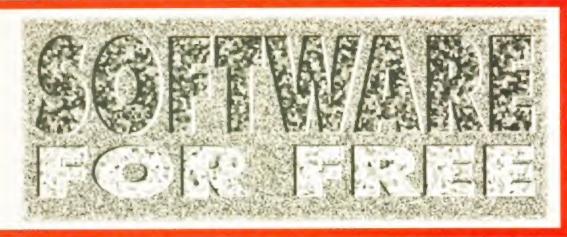
When I try to run *ProVideoPlus* all I get is a Workbench screen. Help!

Frank O'Shea
Pontardulais, W. Glamorgan

I'd hazard a guess that *ProVideoPlus* doesn't work on your A1200 because it's quite old now – and certainly pre-AGA in its design. Which would mean that it wasn't written to run on AGA machines such as the A1200, and so it may not work properly. It seems to be the case as far as you are concerned.

As for BT2, I spoke to distributors Meridian Software and they said that they've been inundated with user problems in regard to BT2 working on AGA machines. Apparently it works OK on some machines and not on others – but nobody seems to know why. Meridian suggest that you call or fax Innovision Technology (☎ 0101 510 638 0800, Fax: 010 510 638 6453 – marked for the attention of Tom Patrick), the makers of BT2 and ask them if they've solved the problem yet. There was suggestion that Innovision were going to release a version of BT2 which supported AGA but this doesn't seem to have happened yet.

So it seems that you're stuffed, at least as far as BT2 and PVP go. My best suggestion would be to first contact Innovision, then – if you get no joy – consider shelling out some big bucks for *Scala MM300*. You could also try using WB3 instead of ReLocKick and see if that helps. The bottom line is that times change, machines improve and some software gets left behind. Unfortunately, that's how it goes in our fast-moving world of high-tech. *Gary*

SOFTWARE FOR FREE

Every month Graeme Sandiford reviews and rates the very best of Amiga PD and shareware programs – only in Amiga Shopper.

This is a quality selection of my favourite PD and shareware programs this year. In these pages of "the mag you cannot afford to miss if you are serious about your Amiga" I do my very best to find you the most useful, interesting, weird, unusual, beautiful and tasty PD programs I manage to lay my hands on each month.

VIEWTEK 2.1
KEW=II (disk no. V1145)

Without doubt, one the PD utilities I have found most useful over the past couple of years is *Viewtek*. This handy Wb 2+ program can be used to view animation, pictures and even convert picture from GIF or JPEG to the IFF format. It has

Viewtek is an indispensable tool for view graphics files, and with the arrival of 2.1 it's even better.

been written by Thomas Krehbiel who also happens to be the creator of *ImageFX*, one of the top image processing packages for the Amiga. One of the things that most people like about *Viewtek* is the ease with which it can be used. You don't have to fiddle around with hundreds of AmigaDOS options, although you can if you desire – you can just double-click on its icon from Workbench and then use the file selector to choose which picture or animation you wish to display.

Another way of using the program is by selecting your files from Workbench by shift-clicking on the image files and then double-clicking on the *Viewtek* icon (holding the shift button on the keyboard and selecting each file in turn). *Viewtek* will then display the first picture – to view each the remaining pictures you can prss your left mouse-button. If you press the right mouse-button, this will abort the loading of the selected pictures.

So what's new in this latest version? The program now has a configuration file which contains the default display options. Viewtek will also read options that may be contained in the picture icon's Tool Types. To alter the configuration file you need to open a text editor, such as ED, and then uncomment the different options (by removing the semi-colons from in front of the options you wish to use). Once you have saved the configuration file Viewtek will refer to it before displaying an image or picture. However, any options you enter from the CLI will override those contained in the configuration file.

Another useful new feature is the ability to display an animation directly from a disk. This means you can display an animation that is larger than your available free memory. *Viewtek's*

documentation explains how this works quite well – there are two tasks: one that is set for reading data from a disk; and another for displaying the data. The two tasks work simultaneously, so you should see a smooth playback. The quality of the playback depends on the size and complexity of the file, the speed of your Hard Disk, and the buffer size. To achieve the very best playback, you will need to try out several buffer sizes – a certain amount of patience is needed to get good results.

Viewtek also supports DataTypes. These can be used to add additional image formats to *Viewtek's* repertoire. Another advantage of using DataTypes is that if you come across a DataType for a compressed format, such as JPEG, that is faster than *Viewtek's* own decompression routines, you can specify that *Viewtek* uses the DataType instead.

Viewtek is AGA-compatible in all modes, 24-bit images are displayed and saved in HAM-8. Version 2 now has now extended its support for 24-bit graphics cards. The disk is supplied with different versions of the program to which it will display your files on the corresponding card. The cards supported are: DCTV, IV24, OpalVision, Retina, EGS, Firecracker24 and Picasso.

This really is a fantastic program – we would recommend it to anyone who is into graphics or has any graphic files they want to access quickly and simply.

Program Rating 93%

GRINDER
Roberta Smith DTP

Now, I know this program's name makes it sound as if it performs some kind of unpleasant task or

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BEGINNERS START HERE

The world of Public Domain is great because of its fantastic variety. There are all sorts of software categories: shareware, freeware, charityware, and even giftware. So here's a quick list of the categories of programs you are likely to encounter in the PD World.

● PD stands for Public Domain. It's the most widely available kind of software discussed in this section of the magazine. It's actually free; the only condition is that the program and associated

files are remain unaltered and are distributed together. A PD library should only charge a nominal fee for disk duplication, postage and the library owner's time and effort.

● Shareware is a rather simple concept, but it relies to some extent on a person's honesty. It gives users the chance to try before they buy.

Two versions of a shareware program usually exist. One is a limited version, which can be freely distributed, and the other is the full version, which is only

supplied to users who pay the registration fee.

● Licenseware is more like commercial software in that you have to pay in advance for the program, but the author gets some of this money.

● You may well be wondering: "If I find a useful program in the Public Domain can I make a copy for my best mate?" The answer is usually yes, but you can't distribute registered shareware or licenseware.

● Giftware is where an author asks you to send a gift if you find his or her program useful.

● Charityware is another extremely well-intentioned form of software. The author of a piece of charityware will ask you to make a donation to a charitable organisation.

● Whiskeyware is a new concept pioneered by our own Toby Simpson. If you use the program, you send him a bottle of (decent) whiskey.

serves some sort of sordid function, but *Grinder* is simply a picture converter. Oh no, not another picture converter, I hear you say. But, this is a picture converter with a difference. Oh no, not another picture converter with a difference. No really, this is an excellent picture converter.

The thing that grinder has that most PD conversion programs lack, is that it can execute a script of conversions so you can perform a batch conversion. But, the best thing about it is how easily you can compile a batch. There is no need to fiddle with AmigaDOS options. To compile a list of pictures to convert, you can make use of a filerequester.

Once you have selected your input files, the next thing you need to do is select the output files' format. As well as the program's ease of use, it has another bonus in the number of formats it can handle. It is by no means a new product, but it can handle pictures from a variety of computer platforms, including several Atari ST and PC ones. It can also handle some older Amiga formats.

The bottom line is that although *Grinder* is quite old, it is still very easy to use, it can handle several file formats and its batch conversion abilities can make life a lot easier.

Program Rating 87%

ABANK

Immediate Arts PD

Abank is a charming little account management program from France. It was written because its Author was fed up with ugly-looking accounts programs, and who can blame him. Thankfully, *Abank* has been designed to be easy to use as well as pretty to look at. However, it is demo version of the full program and is limited to 50 operations.

Aside from being pretty, the program has a few other impressive features. It is AGIP-compatible (AMOS Global Interface Protocol), which means if you have a copy of AGIP you can alter the program's interface as much as you like. It can also load PowerPacked files. The program can simultaneously load ten accounts and can produce graphical statistics.

As the author intended the program is very easy to use. To create a new account you first

Grinder is a program that can convert stunning images such as this one. It can also convert several images, using its Batch mode.

need to give a few details such as the name of the account owner, the account number and your starting balance. You can even add one of the programs ready-made icons for your bank or the account type. Once this has been done you can add operations (transactions) by simply entering a date, its nature and whether it is a credit or debit.

As you enter your transaction two running titles are updated. The first is your Real balance, which consist of transactions that have and have not been validated. The Bank balance derived only from validated transactions. You can also generate bar and pie charts to give you a pictorial view of your account's status.

In operation the program pleasant and easy to use. However, it is not without one or two bugs. The main one is that it doesn't multitask probably – when you switch from the program's screen you can get back to the program. Nonetheless the memory that is taken up by the program remains unavailable – bummer.

Aside from that little quirk the program is excellent and certainly makes a change from all those dreary MS-DOS look-a-like account managers.

Program Rating 91%

FRACTINT

Cynostic-

If, in a moment of weakness, you were to have a look around a PC user's hard disk, there is one program that you would probably find in the majority of them. That program is *Fractint*. For several years it has been one of the most popular PC fractal utilities, with a constant stream of upgrades and enhancements from many programmers. Now Terje Pedersen has ported this program over to the Amiga, so you can now see how it should really be done.

Fractint is pretty fast, but no fractal program is ever going to be particularly speedy, especially when you get into some of the higher magnifications. For instance, the super hi-res 256 colour fractal on page 86 took about five minutes to draw, but this was on an A4000/040. Other machines would be significantly slower than this.

The fractals can be created on any screen from the workbench display database, so you could even generate 24-bit fractals if you had a 24-bit card, such as the Picasso II or EGS Spectrum, which worked with the operating system.

Fractint also requires the Magic User Interface (MUI) system, so this will also have to be installed. This is used as an easy way of creating all of the file requesters and such like. This really doesn't stop *Fractint* being a bit of a pain to use. Mind you, it does serve as a lesson in what PC owners have to put up with.

Program Rating 75%

THE QUATERMASS EXPERIMENT, ISSUE 2

Immediate Arts

Sometimes I'm sorry that I missed out on the '50s. You had all these great classical sci-fi B-movies to choose from. For example you had the *Quatermass* series; *The Quatermass Experiment*, *Quatermass and the Pit* and the others. However, these halcyon days are not lost forever. *The Quatermass Experiment* is a disk-based magazine that attempts to recapture the magic of expressing wild new ideas.

It is released roughly every eight months and contains science-fiction stories by amateur writers. Some of them are quite entertaining, especially the IPAC (Interplanetary Army Corps) Epics. This

Tammy Wynette fans beware, "Please release me" may cause offense.

Somewhere in the depths of the Mandelbrot set, you can find this interesting formation, but don't hold your breath while it renders!

section of the magazine is a collection of stories written by a few regular contributors. These stories are based in the IPAC universe – this is set in a time-period where mankind has been forced to move away from Earth. This move gives rise to all sorts of greed, corruption and general skullduggery. This is where IPAC come in, to police the galaxy.

It's difficult to give a verdict on this magazine – you will either like it, or you won't. Suffice to say, if this is the sort or thing you like, then you will like this sort of thing.

Product Rating 1-100%

PLEASE RELEASE ME

Roberta Smith DTP (McC003)

Bizarre is one of my favourite words and it is the only word that can adequately describe *Please Release Me*. It's an animation from Iain B McCaffrey, which can be played on any Amiga with 1Mb. It was made using *DPaint IV* and *MovieSetter* and runs for about 50 seconds.

If you think the title of this animation sounds familiar, it's because it's also the title of a song by Tammy Wynette. It is this song that is the butt of this humourous animation. It starts off with a view of a female singer's head, which is nodding from side-to-side, as it sings, "Please release me, let me go". As it sings this last bit the camera zooms out to reveal that the head is actually an inflated balloon, which is released by a pair of fingers. The head then flies around the screen, deflates and slowly falls from view.

It's simple, but it is also well-animated and unfeasibly funny. If you are in need of a good

Charley has never much luck with women, or with female cats for that matter.

Although Lunchtime has been certified by the British Board of Frisian Cows it may still offend.

chuckle, then I would advise to order this disk straight away – I guarantee you will be in stitches.

Product Bizarreness 92%

CORAL QUARREL (STARRING CHARLEY CAT)
Roberta Smith DTP

Coral Quarrel is a five-disk animation, created by Anthony Whitaker, that stars Charley Cat. Charley is a cute cartoon-style cat who decides to have a day out at the seaside.

This animation details the chaos that ensues as a result of this fateful outing. Things start off reasonably well, Charley arrives on the beach and sets up his huge amount of equipment. To keep the sun off, Charley has also brought a parasol, but the accursed thing won't stay open, this provides an excuse for all sorts of comic antics.

Anyway Charley decides to hang-ten, and charges off in his wet suit with surfboard in hand. While pulling several stylish poses he crashes headlong into a large post.

On returning to the beach Charley spies an attractive female cat. But she's accompanied

by her boyfriend and this is where the real action starts. It comes thick and fast too, in true Tom and Jerry-fashion, with violent blows and tricks aplenty.

Well, that's as much as I am going to tell about the actual story. The quality of the animation is excellent, it's very fluid and well-drawn. The only thing you might want to consider, is that one or two scenes may be unsuitable for young children. But there is nothing in there that is any worse than you might find in a most children's cartoons. Because of the number of disks the animation is on, loading takes a heck of a long time. However, I think it is definitely worth the wait.

Product Rating 87%

LUNCHTIME #5 "WARDROBE RACING FOR FOREIGNERS"
Roberta Smith DTP

In my eight months or so of reviewing PD software for Amiga Shopper I can honestly say that I have come across a number of bizarre things. This two-

disk magazine is the most strange, but oddly entertaining thing that I have encountered.

It's produced on a yearly basis. Apparently, "the writers are all put in a little room, our eyelids are propped open with match-sticks, our mouths are sellotaped shut and our names are changed by deed poll to Dame Xanthia Sagga, until the magazine is complete". If you ask me, it all sounds a bit too much like Amiga Format's monthly routine.

Anyway the magazine is humour-based, and I must say it is by far the funniest I've seen so far. Be warned though, it's the sort of thing that makes you laugh so much that if you're drinking at the time then it will come pouring out your nose. However, it does contain some material that is likely to cause offense – there's a bit of bad language too.

On the whole though, it is hilarious. When you bootup the first thing you will see is a short animation that is a tad on the sick side, but not too much. After that has been displayed you are free to read the articles. There is a wide variety of topics covered and several short stories. One that really split my sides was the mock BNP newsletter – hilarious.

The stories are well written and vary greatly in style. Some are outrageous through out, while some start off quite seriously and then go berserk half-way through. But, they are all funny, if a little childish at times, and managed to amuse most of the office. However, you should be warned that some of them, well most really, could cause offense and are definitely the sort of thing you wouldn't like your child to read. I would advise you to buy this disk and keep it in a safe place. It may be worth something in a few years, when they have become famous – unless they are committed to an asylum first...

Product Rating 97%

IMAGE PROCESSORS HEAD-TO-HEAD

Image processing is definitely one of the most exciting and useful areas of computing. As a result there has been no shortage of programs for the Amiga, both commercial and PD. However, until recently, the PD world has only been able to offer some pretty wimpy specimens.

Those of you with long memories might remember that an exception to this was reviewed in issue 37. BlackBoard has had it easy for some time now, but it has a serious competitor in the form of ImageStudio. In order to find out if BlackBoard is still the best PD image processor we decided to have a head-to-head with version 3 of BlackBoard and ImageStudio 1.01.

BLACKBOARD
F1 licenseware

Version 3 of BlackBoard comes on three disks and has supposedly undergone some serious de-bugging. The program has also become licenseware, now costing £5.99. All the old features are still there, including morphing, warping, pixellation, embossing and bulging. To help people get to grips with the program, an AmigaGuide file has been included as well as a text file.

"BlackBoard is far from a finished product – however, when it does run correctly it becomes an incredibly powerful tool."

The program has stuck with its modular design – loading each feature as a separate sub-program. This has its advantages and disadvantages. The main disadvantage is that you have to wait for sub-programs to load into memory. The good news is that this method uses up less memory. Among the new features the most notable are Landbuild and a ripple function.

Ripple performs the same function as the ADPro and ImageFX tools. It distorts an image in such a way as to give the impression that image has been turned to liquid and then rippled. As version 3 as support for Arexx the author has

"ImageStudio is an impressive program."

added an example script that alters the phase of the ripples over period of time. This gives the impression of moving waves.

Landbuild is a fractal landscape-generator much like VistaPro or Scenery Animator. As well as creating its own fractal-based landscapes the program can also load DEMs (Digital Elevation Maps). However, it is far from a finished product and there are quite a few bugs. I was unable to use it as a sub-prog but had limited success running it as a stand-alone.

BlackBoard has even more powerful features but, it also has increased its number of bugs. However, when it does run correctly the program becomes an incredibly powerful tool.

Program Rating 91%

IMAGESTUDIO
Graham Dean, 14 Fielding Ave, Poynton, Stockport, Cheshire, SK12 1YX

This young contender looks quite sprightly compared with BlackBoard – it barely fills a single floppy, including its example images. Judging by the interface, the program seems to have been heavily influenced by ADPro 2.5. The interface consists of a main preview window and several smaller ones for convolutions, effects and adjusting

MOVIEGUIDE V2.04
OnLine PD

MovieGuide is a database of recent films. The previous version of the program was a little "flaky", as a result its search functions did not always work as they should. It also lacked any details of the films' storylines. Version 2.04 sets out to make up for the short-comings the first revision

MovieGuide is a two-disk program which can also be installed to hard disk. It contains information about a surprising number of films. In essence it is a database program and is used in a similar manner. You can search for a film by either entering its title, director or the name of one of its cast.

If you have used a search criteria that produces a list of several films, you can also choose a sorting method. You can view the films by name, genre or by year. To reduce the searching time you can limit the program to a genre and a country of origin.

Once a list of films that match your criteria has been compiled, you can click on each film to view its director, cast and on some, a brief description of the plot. If you click on either the directors name or a member of the cast, the program will then direct its efforts to finding all the films that a director has directed or that a member of the cast has appeared in. You can also print out entries.

When I'd taken a look at this program before I was quite impressed, but disappointed by the unpredictable search function and lack of information about the films plot. Well, the search function has been fixed, but while plot information has been supplied with several films there are quite that have not.

Maybe I'm being unreasonable and they've

only described the films they have watched themselves. I guess there is a limit too how many films you can watch and how many you can afford to buy. Nonetheless this is good package that has been smartened up and made into an ever better one.

Product Rating 92%

VMM (VIRTUAL MEMORY MANAGER)
Cynostic

If there is one thing that a serious Amiga-owner can never have too much of it's memory. However, memory is not cheap and as a result very few people can actually afford as much as they would truly like. There is an affordable alternative – virtual memory – and now, with VMM, it's become even cheaper.

The way in which virtual memory works is that it lets your machine use disk space as if it was memory. This can be performed using either a hard disk or a floppy. Obviously, a hard disk is preferable as it's quicker than a floppy – although slower than real memory. In fact, virtual memory is quite a bit slower than real memory.

By default, VMM creates a file the same size as the virtual memory you specify. To help speed things up, VMM can also use a partition or pseudo partition. A dedicated partition is the fattest option as you don't have to worry about fragmentation.

However, if you don't want to go to the trouble of re-formatting your hard drive you can create a pseudo partition. The pseudo- partition is actually a folder of contiguous hard disk space. To get the largest size possible you may have to defrag your drive.

Once you have got the program up and running

and your hard disk optimised, VMM's operation is pretty much transparent to the user. Virtual memory behaves in the same way as ordinary memory, even showing up in your Workbench's Other Memory total. Virtual memory can either be added to a program or a Workbench task. This way the virtual memory won't kick in, and slow down your machine, when it's not needed.

Adding a task or program is easy. To add a task you just click on the Add task button and a list of current tasks is opened. You can then select a task and then click on use. Adding a program is just as simple. After pressing the Add Program button you can use a standard file requester to select a program. The next time that program is run it will utilise the amount of virtual memory you have assigned to it.

You can specify the amount of memory and other options from the Memory Settings menu. This where you can decide how the memory will be allocated and how it will be recognised by your system. You can use the virtual memory as either Fast or Chip RAM. You can also set the memories priority and its swap medium which, as mentioned earlier, can be a swap file, a partition or a pseudo-partition.

I must admit I had my reservations about this product, but it turned out to be pretty stable. The only problems I had was that sometimes when I quitted from VMM it crashed my machine. I've had it on my machine for nearly three weeks and have used it with *Imagine 3.0*, *Pixel Pro 3D2* and *LightWave* regularly. Aside from Imagine barfing out a couple of times they all worked perfectly. The only drawback is that you need at an 030 processor with an MMU. This is a program that is going to stay on my Hard Disk for a very long time and if you are a subscriber you can add it to yours straight away, as it is on the Subscribers' Disk.

Program Rating 97% *AS*

BlackBoard's rein as king of the PD processors may be coming to an end. Read the head-to-head review to find out why.

ImageStudio is an up-and-coming challenger to BlackBoard. But, has it got enough firepower to dislodge the champ?

the image's balance. It also makes use of several pull-down menus to grant access to its other features.

ImageStudio is shareware and the registered version of the program can be purchased for £10. The only limitation the unregistered version has is that it can only load images that are no bigger than 250x250 pixels. The full version is able to handle images up to 32,000x32,000 pixels and will include a 68020+ optimised version of the program.

Two of *ImageStudio's* most impressive functions are its limited selection and custom convolution tools. Being able to make limited selections gives you the chance to combine effects. This ability can be used with striking effectiveness. Being able to create your convolutions means you have an endless numbers of effects. You can generate a new affect by altering values of a convolve matrix.

ImageStudio is an impressive program, all the more so considering that this is its first revision.

It's a good solid program with more than a few good features that, while not particularly fantastic in nature, are good to have – such as multiple undos and redos. I like this program and though it just loses out to *BlackBoard*, it was a very close match. The main reason *BlackBoard* comes out on top is that it simply has more features and more powerful ones. *ImageStudio*, however, is more reliable and easier to use. It has also won a place on our coveted Subscribers' Disk.

Product Rating 90%

AMIGA
SHOPPER

Jason Holborn dons his Public Domain hat and ploughs through another mountain of disks that have piled up on his desk over the last month.

PD Update

Everyone knows what a great machine the Amiga is not only for video, but all manner of graphics work including paint and animation. Surprisingly, although Amiga developers have always kept Amiga graphics users well supplied with new and exciting video and paint software, the range of animation editors available is limited. OK, so both *Brilliance* and *DPaint* offer animation facilities, but there's nothing like the control that a dedicated animation editor can provide.

As always, the PD libraries have the answer this time in the shape of *MainActor 1.54* (PD Soft, disk V1157), a major upgrade to the earlier version published on the Subscribers' Superdisk (*AF61*). *Version 1.54* has had a complete overhaul – lurking under the beautifully-coded Workbench 2.0-compliant front end are a host of new features including a greater range of animation import and export modules (*MainActor* now supports a wide range of common 24-bit video cards), sound support (samples can be tied to individual animation frames allowing frame-perfect cuing of samples) and much better support for the playback of animations direct from hard disk (*version 1.54* plays back animations between two and five times faster than the previous release).

If you haven't already seen *MainActor*, you'll be amazed by its huge assortment of animation controls. Not only can existing animations in a wide range of formats be loaded and edited but animations can also be built up by loading single IFF frames from disk. Full documentation in *AmigaGuide* format is provided with the program, so you can get up and running quickly. *MainActor* is destined to become a PD classic.

Ian West and Jonathan Eggelton have released a brand new PD game for the festive season. Called *Santa And Rudolph Do Christmas*, this brilliantly executed arcade game was written using *AMOS Professional*, the star of this month's *Amiga Format* Coverdisk. Indeed, if you really want to see what *AMOS Professional* is capable of in the hands of an experienced coder, buy this disk.

The gameplay is nothing original, however. The basic idea is to guide either Santa or Rudolph through the arcade action, shooting the evil penguins and other assorted nasties that are threatening to ruin Christmas for all the girls

SANTA: Nothing stands between the forces of evil and the joy of Christmas other than Santa and his big gun.

and boys (yeuch!). Every so often, a present drops down the screen which must be quickly picked up and delivered to one of the many doors and chimneys scattered about. To aid them in their quest, our heroes are armed with a high-velocity rocket launcher and a helium-filled balloon to help them travel around the screen.

Santa And Rudolph Do Christmas won't set new standards in gameplay but its wonderful graphics and festive tunes give the program that extra little something that is often sadly missing from PD games. *Santa And Rudolph Do Christmas* should be at the top of your Christmas PD shopping list.

17Bit's new astronomy program *Cassini* (disk 3368) is written in HiSoft *BASIC* and is a fascinating tool designed to allow budding astronomers to obtain information on all manner of heavenly bodies including stars, planets, constellations, quasars and so on.
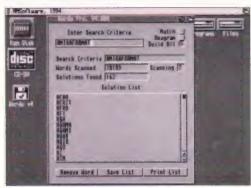
The author, David Hartley, originally wrote *Cassini* to help him determine the best time to observe the planets and has put the program into the PD libraries to allow other Amiga-owning astronomers to benefit from it. Although the presentation is less than ideal (don't expect a *Distant Suns*-beater), the wealth of information that *Cassini* provides is astounding. Great stuff.

CASSINI: Track down your favourite constellation without straining your neck with David Hartley's *Cassini* astronomy program.

MAINACTOR 1.54: Create your own animated movies with this brilliant PD animation editor which has been completely overhauled from the first version.

WORDSPRO: Solve all those magazine word puzzles without straining the old grey matter with AmigaNuts' new WordsPro 4.

← Wargames have moved on a long way since those stuffy text-based games that were so popular a few years ago. Back then realism was more important than gameplay – unless you were prepared to sit and feed in reams of boring mission data and then wait for three weeks for something even mildly interesting to happen. Thankfully, those days have long gone (well, almost) as this new game from PD Soft proves...

Task Force (disk number 3897) is a top-down wargame that puts you in control of a team of four crack hi-tech warriors who must complete many missions of unremitting action. At the start of the game, you're treated to a short slideshow that sets the scene beautifully. Then the action moves on to a series of rather *Syndicate*-like set-up screens that allow you to choose which mission you wish to attempt and then individually equip your team with all manner of military paraphernalia.

Once you're dropped behind enemy lines, the game transforms into a traditional wargame with the action taking place in turns – a move-and-fire turn for each of your soldiers followed by the same for enemy troops in the surrounding area. What equipment you give your troops radically affects how far that trooper can move in a single turn – give him a bazooka and he'll struggle to walk.

Puzzle fans can rejoice at the launch of AmigaNuts' *WordsPro Version 4*, a powerful utility that can solve anagrams, suggest words for crossword puzzles, build a list of words from the

TASK FORCE: Guide four crack troops behind enemy lines in PD Soft's wargame romp.

characters of a given word and so on. Running from the Workbench (which is unusual for this type of program – most puzzle solvers are written in *AMOS*), the program comes complete with a glossary of over 100,000 words.

This glossary was constructed by feeding in the dictionaries from other programs and by manually keying in the solutions to as many crossword puzzles and word search puzzles as the author could lay his hands on. Whenever you ask it to suggest a word, *WordsPro* searches through its glossary and lists any words that match its given search criteria. Considering the size of its glossary, searching for a word is surprisingly fast (although this is aided by a fast processor and a hard disk-based machine).

For puzzle fans everywhere, *WordsPro* is an absolute godsend. If you enjoy playing word puzzles, get a copy of this program.

PacMan has been brought bang up to date with *BombPac* (disk G1086) from Kew-II Software. Based around the classic *PacMan* arcade game but with a taste of *DynaBlaster* mixed in for good measure, *BombPac* is an AGA-only arcade game that – despite its rather weak graphics and sound – is a fun little game that combines race 'n' chase maze action with a healthy serving of puzzles.

Most programming languages allow you to create executables from your source code using a compiler, a utility that converts your source code into a list of instructions that your Amiga can understand without the use of a separate interpreter. If you enjoy dabbling with the *ARexx* interpreter bundled with all Amigas since the A500+, Essex Computer Systems' *Arco* will be of interest.

Arco is an *ARexx* Compiler – it takes *ARexx* source files (stored in ASCII format) and translates them into machine code. Once compiled, your *ARexx* programs can run without having to pass them to the RX *ARexx* interpreter. Another advantage is the raw speed of compiled *ARexx* code – in contrast to interpreted *ARexx*, compiled *ARexx* programs are very swift. Add to that the ability to make use of link libraries which you can build up to contain your favourite *ARexx* routines and *Arco* is a must for all *ARexx* programmers. ☺

BOMBPAC: Collect the little black dots and mystery bonuses but stay away from those nasty spiders.

ARCO: Tired of your *ARexx* programs running slower than something very slow indeed? You need the *Arco* ARexx compiler.

WHERE TO GET THE DISKS IN THIS ISSUE

KEW-II SOFTWARE, PO Box 672, South Croydon, Surrey CR2 9YS. Tel: 0181 657 1617

ESSEX COMPUTER SYSTEMS, 15 St Nicholas Road, Tillingham, Essex CM0 7SQ. Tel: 01621 778778

AMIGANUTS UNITED, 3 Spring Road, Bitterne, Southampton, Hampshire. Tel 01703 397727

17BIT SOFTWARE, 1st Floor Offices, 2/8 Market St, Wakefield, West Yorkshire WF1 1DH. Tel: 01924 366982

PD SOFT, 1 Bryant Avenue, Southend-on-Sea, Essex SS1 2YD. Tel: 01702 466933

Demo Zone has come under fire for a few choice remarks made about the state of the coder's art! **Steve McGill** stands by his words.

PD Demo Zone

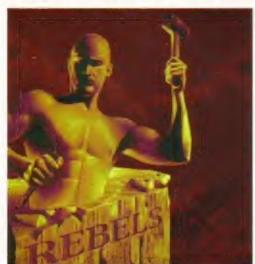**CHARLEY CAT:** Classic gags merge with classic technical competence to produce a cartoon worth a chuckle...

...Throughout the cartoon, Charley and his friend are chased by this loveable rogue. Aaah...

...Many of the gags draw on *Tom And Jerry* for inspiration. *Cat Napping* from 1951 used this one.

Demo Zone picked up a bit of flak from some Net people recently. The points raised against the Zone included criticism that it had unjustly put down demo coders because of the general lack of originality permeating the demo scene. Apparently, a few feathers have been ruffled.

For that, no apologies will be made. The Zone stands by what was said. But maybe more in the way of an explanation should be forthcoming.
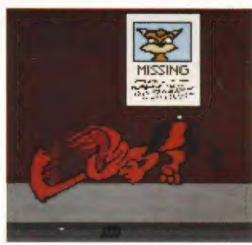
Regarding the lack of originality – too many swirly line vector routines, tunnel routines, texture-mapped cubes and tinkly bonk tunes – the criticism remains the same. Too many demo teams bang these out as if there was no tomorrow and expect people to be impressed.

The defence that other coders are only learning the routines and don't deserve to be slagged off for climbing the steep learning curve is legitimate. There's nothing more helpful than looking at other people's work and learning how to do it for yourself. But surely the teams should strive to stamp their own identity on their work so that it stands out from everyone else's – perhaps by being entertaining or humorous.?

Who wants to spend hours and hours coding a routine, only to have it look and sound like any other team's demo? It goes against the grain of individuality and achievement.

That's why the Zone particularly liked *Seventh Heaven* by Maestro and Dillinger (*AF64*). It proved that you don't need to be a coder to produce an entertaining demo. Too many coders are intent on elitist one-upmanship. It's a culture of supremacy with an ethos that rivals some of the more unpleasant supremacist cultures dotted around the country.

Another criticism of the Zone was that it seemed more intent on crediting any demos mentioned in its pages to the PD house supplying the disk. An absolutely valid point and one to be rectified next issue. Instead of sticking the name of a PD house beside the title, we'll list some houses who carry the disks instead.

Without further ado, it's on to this month's offerings from some of the talented teams dotted around the continent.
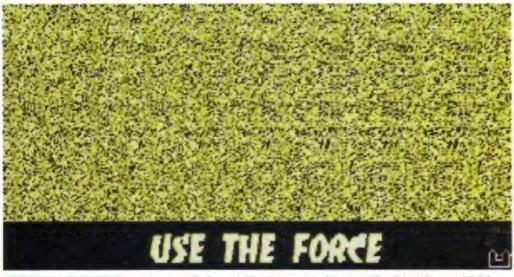
Switchback is the first AGA demo by Rebels (Telescan). It was first released at the Doomsday Party and very tasty in parts it is too. It kicks off conventionally enough with a tunnel sequence, a load of text and some swirly real-time colour rotations. This is followed by a reasonably

SWITCHBACK: In the demo, this pic is about one and a half screens big and it moves up and down. Hurrah!...

...It's only displayed for a few seconds in the demo, but this baby could make it into the *AF* Gallery any day...

...Still shots do this section no justice whatsoever. You should see it moving.

USE THE FORCE

STEREOGRAM SLIDESHOW: It's easier to see the image in the dots on an Amiga screen than it is with normal lighting.

WATER SPLASH

Ian Crossfield

STEREOGRAM SLIDESHOW: It's animated – and it works.

impressive motion-blurred rotating pentagon and then a whole series of texture-mapped shapes with various motions applied to them. They're sort of relaxing to watch in much the same way that the lava lamps of the 70s were.

Most impressive, and the section that most of the *AF* team watched more than once, is an animated texture-mapped rollercoaster ride. If you've seen the intro to Bullfrog's *Theme Park*, you'll recognise the style and this is just as fast and as exciting as the commercial offering. One to stop the crowds and introduce people to the real power residing in an A1200. Recommended, if only for the rollercoaster sequence.
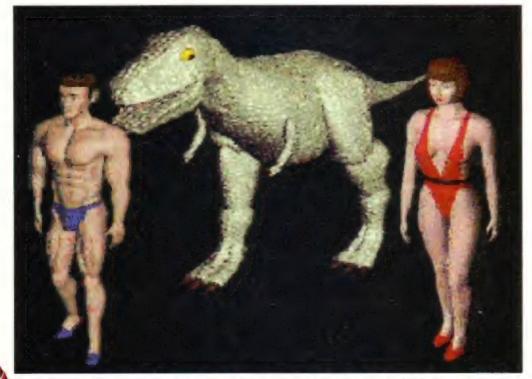
From demos to animations. *Jap Cat Japes* is the latest in the *Charley Cat* series of cartoons from Anthony Whitaker (Roberta Smith DTP). At least 2.5Mb is needed to run it and if you have over 4.5Mb the whole animation can be run in one continuous sequence. Anyone interested in trying the same thing themselves should take note of the software used by Anthony – *DPaint IV*, *Moviesetter* and *Technosound Turbo*.

It's the tenth in the *Charley Cat* series, and this time, Charley meets up with an oriental friend

who's fallen off of the back of a lorry and lands up outside Charley's door. Various adventures befall the hapless duo and you can't help but feel sorry for the dog who tries his utmost to spoil the feline chum's fun.
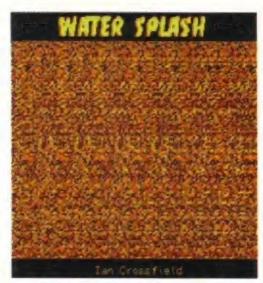
The anim is Shareware and features several professional effects that you find in commercial cartoons such as bounce, stretch, squash, reactions and relevant action sounds. All in all, it's relatively polished and throughout the production it manages to raise a chuckle.

From animations to a slideshow with a difference – *Stereogram Slideshow* (Telescan). Most people admit freely that they can't see anything in stereograms. At first, I was the same. It seemed like a big con to me. But the secret of seeing something lies in the lighting.

The advantage of a computer display is that the lighting is even and generated from the screen itself. It's just as well with this collection. The definition isn't too strong, but they're easy to pick up due to the consistency of illumination. Even more exciting is that one of the stereograms is animated. And it works as well. Recommended if you can see the pics in the first place and doubly recommended for the animation.

The last of this month's offerings is from Graeme Scott of Banffshire. It's an untitled 3D ray-traced anim featuring a T-Rex, a man and a woman. The subtle motions of the legs, hips and shoulders of each subject is especially impressive. Get in touch with some PD houses Graeme so that your anim can be distributed to a wider audience – it deserves to be studied by those with aspirations toward 3D work. It's inspiring.

We're on the lookout for up-to-date demos. If you're part of a coding team, or an individual with something worth viewing, why not send your demos to us on CIX or the Internet? UU encode the file(s) and send to either amformat@cix.co.uk or amformat@futurenet.co.uk. Prefix anything you send with the following four letters: Demo.

Attach a ReadMe file to let me know what your aiming to do with the demo, how long it took to finish and the equipment and software you used for the final production. Oh, and if you've got any gripes or praise about the Demo Zone, write them down as well. And don't pull any punches. 🜏

WHERE TO GET THE DISKS IN THIS ISSUE

ROBERTA SMITH DTP, 190 Falloden Way, Hampstead Garden Suburb, London NW11 6JE. Tel: 0181 455 1626

TELESCAN, PO Box1, Thornton-Cleveleys, Lancs FY5 1SH. Tel: 01253 829292
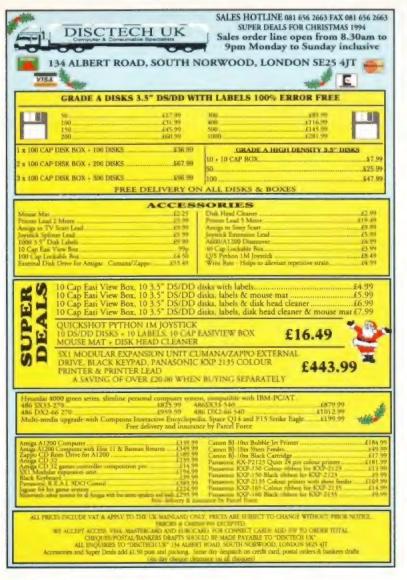
ONLINE PD, 1 The Cloisters, Halsall Lane, Formby, Liverpool L37 3PX. Tel: 01704 834335

The motion on the figures in Graeme Scott's untitled demo, particularly the shoulders and hips is almost believable.

TOP 10 DEMOS

The kind supplier of this month's top 10 demo chart is:

KT'S PD
01702 542434

1. Some Justice 94
2. Like Death
3. Industrial Fudge
4. Spasm: I Feel Good
5. Quackbusted 2
6. Ariel Ultra
7. Oxygene: Cuzco
8. Complex: Real
9. Mini Omestan
10. Gevalia

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Including a brilliant cover-mounted CD containing demos of 16 CD32 games, reviews of over 40 CD32 games, a look at what the future holds for CD32 games and heaps more...

ISSUE 63: SEPTEMBER 1994
Coverdisks: Complete Gold-rated DTP PageSetter 2 package worth £99 and demo of Psygnosis' Doom-like G2.
Main Features: DTP, in-game graphics.
Serious: Lightwave 3.5 preview, Warp Engine, Workbench 3.1, round-up of accelerator cards.
Games: Theme Park, Putty Squad, On The Ball, Ishar 3, Universe, Kid Chaos.

ISSUE 62: AUGUST 1994
Coverdisks: Complete music package OctaMED Pro V5 worth £30 and demo of the motor mogul game Detroit.
Main Feature: The Amiga's role in the interactive television revolution.
Serious: Zappo CD-ROM drive, Retina Z3 graphics card, Microbotics SX-1, Blizzard A1230-II accelerator card, HiSoft Basic v2, Maxon screen blanker.
Games: Banshee, Kick Off 3, Empire Soccer, Benefactor, Kings Quest VI, Burntime, Bump 'n' Burn and Mega Race preview.

ISSUE 61: JULY 1994
Coverdisks: Complete animation package ClariSSA worth £70 plus playable demos of Apidya and Wembley International Soccer.
Main Feature: Computer animation history and techniques.
Serious: Round-up of hand scanners, Imagine 3, Bars & Pipes 2.5, Zappo Smart Stor, CD32 Video Creator.
Games: James Pond 3, Impossible Mission 2025, Valhalla, Out To Lunch, Armour Geddon, Super Methane Bros, extensive round-up of football games.

ISSUE 60: JUNE 1994
Coverdisks: Complete version of InterSpread worth £20. Demo Maniac and DreamWeb demos.
Main Feature: Computer art packages, Commodore A4000T, round-up of education packages.
Serious: Music X 2.0, Fed-CASE, PhotoworX, Dir Works.
Games: Syndicate Missions, Tactical Manager, Elfmania, Heimdall 2.

Issue: MAY 1994
Coverdisks: Full InterBase database worth £20 and Indexer filing system, Syndicate demo.
Main Features: CD1200, Wordworth v Final Writer.
Serious: Vertex 2, M-tec card, Power scanner, Microvitec monitor, CD-ROM controller.
Games: K240, Arcade Pool, Apocalypse, Mr Nutz, RL Coach, Darkmere, Innocent Until Caught.

SPECIAL EDITIONS

NO.1: THE COMPLETE AMIGA SOFTWARE GUIDE
What a tremendous issue! More than 1,000 Amiga programs reviewed and rated including word processors, spreadsheets, databases, video, paint, animation, music, Comms, programming, education, DTP and more than 600 games!

NO.2: THE AMIGA FORMAT 1993 ANNUAL
Features galore on CD, Commodore UK, a look behind the scenes at *Amiga Format*, the Amiga market in Europe and America, graphics, desktop publishing, music, video, games of the year, programming, emulators, business software and much, much more...

NO.4: THE ENCYCLOPEDIA OF THE AMIGA
Packed with facts and figures, the Encyclopedia contains an extensive A-Z of the world of Amiga plus a comprehensive round-up of every product reviewed in *Amiga Format* up to issue 44.

NO.5: Q & A – AMIGA ANSWERS
At last! Answers to the most commonly-asked questions concerning the Amiga, all in one place. Programming? Spreadsheets? Word processors? Comms? Everything you need is here. Probably.

NO.6: THE GOOD HARDWARE GUIDE
Essential information on more than 200 products to add to your Amiga: drives, digitisers, printers, RAM expansions, genlocks, monitors, emulators, mice, joysticks and more...

NO.7: GAMES SPECIAL
Containing articles on the very first arcade games, Amiga classics, future games, silly games, joysticks, PD games, all the Gold-rated games, plus interviews with Jeff Minter, Sensible Software, Bullfrog, Binary Asylum, David Braben, Andy Braybrook, Geoff Crammond, Steve Kelly and more...

NO.8: THE AMIGA FORMAT 1994 ANNUAL
Expert analysis of what 1994 had in store for the Amiga plus looks at the best of the previous year's serious software, budget titles, demos, games etc.

NO.9: BEGINNERS' GUIDE
Getting started in Workbench, Shell, DTP, graphics, Comms, business, programming, music, plus introductions to CD, PD, games and more. Also includes a jargon-busting feature – find out what all those acronyms actually mean: BBS, CPS, CLI, DPI, EPS, GUI, IDE, IFF, MNP, DMA, PCMCIA, RTF and more...

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ISSUE 66: DECEMBER 1994
Coverdisks: *Tiger Cub* entry level music package from Dr T, *Zeewolf* demo.
Main Feature: The history of RISC.
Serious: Wordworth versus Final Writer, Easy Ledgers 2, 3D special effects products, Video Backup System 3.0, Video Options Card and a CD-ROM roundup.
Games: Mortal Kombat II, Cannon Fodder 2, Tower Assault, Premier Manager 3, Pinball Illusions, Sim City 2000, Overlord, Zeewolf, Fields Of Glory, Aladdin and more!

ISSUE 65: NOVEMBER 1994
Coverdisks: *Pixel 3D Pro* image creation program (needs 2Mb, incl 1Mb Fast RAM), *Sensible Golf* demo.
Main Feature: How the *AF* cover was created.
Serious: Image processing round-up, Page Stream 3.0, The A-Cut, ProGrab 24RT, Indexer, Pixel 3D Pro v2, The Lightwave Collection, TurboCalc.
Games: FIFA International Soccer, UFO, Guardian, PGA Tour Golf, On The Ball, Club Soccer, Reunion, Robinson's Requiem, Crystal Dragon, special Virgin games preview.

ISSUE 64: OCTOBER 1994
Coverdisks: Video titling package TV*Text Professional worth £129, *Theme Park* demo.
Main Feature: We show you how to harness the Amiga's remarkable video and graphics power.
Serious: Genlock round-up, Lightwave 3.5, Protext 6.5, Tabby, TV*Text Pro v2, book reviews.
Games: Super Stardust, Ruff 'n' Tumble, Detroit, Vital Light.

OTHER GREAT ISSUES STILL AVAILABLE

ISSUE 58: APRIL 1994
Coverdisks: Three Coverdisks! *Music-X* worth £199, plus structured drawing package *ProVector 2.1* worth £100, and demos of *Total Carnage* and *Dozer*.
Serious Section: Studio 16, Vista Pro Lite, Art Department Professional 2.5, ClariSSA, Lightrave, Personal Paint 4.
Games: Microcosm, Legacy Of Sorasil, Man United, Perihelion, Champ Man Italia, Hyperion.

ISSUE 57: MARCH 1994
Coverdisks: *Ami-Back* disk utility worth £30, plus *Ami-Back Tools Jr* and playable demos of *Arcade Pool* and *Universe*.
Serious Section: Media Point, VideoStage, QuarterBack 6, VideoMaster AGA, CD software.
Games: Beneath A Steel Sky, Bubba 'n' Stix, The Blue And The Grey, Brian The Lion, Batman Returns, Winter Olympics.

ISSUE 56: FEBRUARY 1994
Coverdisks: Complete *FractalPro* package worth £20, plus demos of *Wordworth 3,*

Tornado and *Toado.*
Serious Section: Playmation, ProText 6, Rainbow 3, TrapFax, Disk Expander.
Games: Tornado, Ryder Cup Golf, Star Trek 25th Anniversary, Maelstrom, Simon The Sorcerer, Labyrinth Of Time, Dangerous Streets, Cool Spot, Goblins 3, Campaign 2.

ISSUE 55: JANUARY 1994
Coverdisks: Full *DiskMaster 2* utility worth £50, plus *Beneath A Steel Sky* demo.
Serious Section: Adorage 2, Final Writer, Vidi-24, 24-bit graphics cards, Fargo Primera colour printer, Multiface Card 3.
Games: Liberation, Genesia, Skidmarks, Stardust, Mortal Kombat, Holiday Lemmings, F1, Jurassic Park AGA.

ISSUE 54: CHRISTMAS 1993
Coverdisks: Full *SuperJAM!* music package worth £75 plus exclusive *Cannon Soccer* hybrid from Sensible.
Serious Section: Magic Lantern, Edit Mate, Money Matters 3, One-Stop Music Shop, Montage, Craft, GVP A1230 Turbo+.
Games: Frontier, Hired Guns, F117A Nighthawk, Cannon Fodder, The Settlers, Kingmaker, Rules Of Engagement.

ISSUE 51: OCTOBER 1993
Coverdisks: Complete *TurboPrint 2* package worth £50, plus playable demos of *Skidmarks* and *Second Samurai*.
Serious Section: Deluxe Music 2, Mini Gen Professional, VideoPilot, Scenery Animator 4, TechnoSound Turbo 2.
Games: Castles 2, Backsides, Patrician, One Step Beyond, Blob, Soccer Kid, International Open Golf, Mean Arenas.

ISSUE 50: SEPTEMBER 1993
Coverdisk: *Deluxe Music Construction Kit 2* demo, plus *Insectoids 2* arcade blast.
Serious Section: Blitz Basic 2, AMOS Pro Compiler, Vidi-12 AGA, Proper Grammar, RAM expansions, Golden Image scanner.
Games: Dune 2, Yo! Joe!, D-Day, Ishar 2, Sim Life A1200, Hill Street Blues, Entity, Blade Of Destiny, Man Utd Europe.

ISSUE 49: AUGUST 1993
Coverdisk: *Stardust* demo, *Genesis 3D*.
Serious Section: InterOffice, Trifecta 500 LX, Home Music Kit, SyQuest IDE drive.
Games: Goal!, The Lost Vikings, War In The Gulf, Syndicate, A320 Airbus, Gunship 2000, Mig-29, The Immortal, Fulcrum, Space Legends, Prey.

ISSUE 48: JULY 1993
Coverdisk: *Syndicate* and *Adorage* demos.
Serious Section: GVP Impact Vision 24, Emplant, typing tutors, Canon bubblejet printers, Power high density disk drive.
Games: Worlds Of Legend, Battle Isle 93, Firehawk, Morph, Championship Manager, Reach For The Skies, Final Fight, Transartica M1 Tank Plat.

ISSUE 46: MAY 1993
Coverdisk: *Charlie Chimp, Fraction Goblins, Atoms* demos, *Check V4* utility.
Serious Section: Pro Page 4, Kid Pix, Bars & Pipes Pro 2, Real 3D 2, Vista Pro 3, Type Smith, DOS Lab.
Games: Lemmings 2, 1869, B-17 Flying Fortress, Scrabble, Knightmare, Desert Strike, Storm Master, Walker, Legend.

ISSUE 45: APRIL 1993
Coverdisk: *Dong!* game demo, image processing and multimedia demo.
Serious Section: Video Backup, CanDo 2, Musicolor, Directory Opus 4, GVP's Image FX, A1200 accelerators, Alfa Power HD.
Games: A-Train, Bard's Tale Const. Set, Hero Quest, Flashback, Lionheart, The Chaos Engine, Legend Of Ragnarok.

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Workbench

Are you bothered, bewildered or bamboozled by an Amiga-related problem? Nick Veitch has the light to shine at the end of your tunnel of confusion, so write to him at Workbench, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Power supply units can be the cause of memory problems and strange things happening to disk drives.

POWER BLUES

I have a very annoying problem with my A1200. I have a 170Mb hard drive and a Blizzard A1220/4 accelerator/memory expansion. Everything worked fine until I bought the A1220/4. Now I have random crashes and strange things happen such as the hard drive not being recognised (after a keyboard reset) and DH0: and DH2: being recognised but not DH1:, though both of the above have only happened once.

Would I be right in assuming that my power supply is not powerful enough now that I have these extras? If so, what can I do? I have read the adverts and can't find a high-power PSU for the A1200, do you know of one?

Paul Irving, Leeds

Unfortunately, I believe you may have got to the crux of the matter. Intermittent faults with drives and memory are more often than not the result of power-supply woes. I believe First Computer can provide you with an upgraded PSU. Give them a call on 0113 2319444.

ZERO PC

I own an A1200, unexpanded in any way. I am trying to use the *CrossDOS* utility that is supplied with Workbench, I have copied the file PC0 to the devs/dosdrivers drawer, as the manual says, but when I put a PC disk into the drive I just get DF0:???? under the icon, and no PC name.

I have tried to click on the PC0 icon, but I get the message:

Device pc0: is already mounted

which I take to mean that it should read PC disks straight away. What am I doing wrong?

Dave Turner, E-mail

It doesn't sound like you are doing anything wrong. Try the following: mount PC0: by double clicking on the icon (or starting up with the icon in the devs:dosdrivers drawer). Now put in the PC disk and open up a Shell.

In the Shell type:

diskchange pc0:

The PC disk should definitely appear now, even if it is a faulty disk. You should then be able to load files from the disk by double-clicking on the disk's icon.

Make sure that you are not trying to access a high-density PC disk, and check that it is not one that uses a custom format.

MISSING LINK

I have a small problem with my hard drive on my unexpanded A1200. I have had a program on the hard drive for about a month and when I was clearing up the drive I found that one of the directories would not delete.

I tried to delete the directory from Workbench and the icon disappeared but when I tried to delete the parent directory the Amiga locked up on me. On rebooting my Amiga the directory had reappeared. I am unable to open the

Continued overleaf ➡

MAKING ATCS

When I read the Workbench pages in *AF65*, I noticed that Mark Slater of Wakefield, has the same problem I had with *PageSetter* CompuGraphic fonts. I too couldn't find a program to generate .atc files, so I altered existing .atc files to suit, using a binary editor.

I started by taking the two .atc files on *PageSetter 2* and looked for relationships between the files and the others in the font set. I found that the first sequence of bytes in each .atc file was different and that it corresponded to an identical sequence in the LIB file for that font. You can get new fonts to work by changing these values on an existing .atc file, to the LIB file values of the font you want to use, and then saving and renaming it.

Mr G Bush, Dunstable, Bedfordshire

Thanks for that tip. There is also a PD program called Makeatc, which performs much the same task.

← directory but I know there is nothing in it. I have been advised to buy *Quarterback* but, before I do, can you tell me if is there any way to kill this directory via the Shell or Workbench?

Also if this letter appears among the hallowed pages of *AF* will my full E-mail address be printed?

*MJWaddington@Bradford
(Curry Capital of the UK).ac.uk*

It sounds to me like your directory structure is completely up the creek, or at the very least, the directory links have become confused. If the directory has been deleted then it should not cause you any problems.

The only reasons for it not being deleted are if it contained a protected file (which you can unprotect using the Workbench Protect command) or if the hash tables are corrupt. The best thing to do is get a program such as *Fixdisk*, *Disksalve*,(both PD), or *Ami-Back Tools* (from Ramiga on 01690 770304) or *Quarterback Tools* (try First Computer Centre on 0113 2319444). They should sort it out for you.

MAC FLOPPIES

Does anyone know if there is a way to configure the *CrossDOS* file system to cope with 800k Mac disks? It is a nuisance putting files from a Mac, on to a PC disk and then on to the Amiga.

P Stoddart, Leics

Unfortunately, *CrossDOS* won't do it, it is designed for PC format disks. Mac double density disks are weird, because they actually rotate at different speeds depending how far out from the centre the disk head is. This was a sad attempt by Apple to get more space on a disk.

One way of reading Mac disks on your Amiga is to invest in the *Emplant* Mac emulator.

SCSI-LESS

I have been the proud owner of an A1200 since the day it was released (well almost). I upgraded from my A500, and I still have my 3.5-inch SCSI hard drive. Can I connect this to my A1200?

If this is not possible can I network my A1200, my CD32 and my A500 to access the hard drive from the A500 and CD-ROM from my CD32 via SerNet and ParNet? Is it possible to store AGA images on the A500 hard drive and access them directly through the ParNet connection?

John Graham, E-mail

You're in luck! New from HiSoft is a PCMCIA SCSI interface unit which HiSoft claim allows you to connect a range of SCSI peripherals to an A1200 or A600. Although this means that you can make use of devices as SyQuest drives and CD-ROMs, the unit's most obvious use is as a SCSI controller for SCSI hard drives. HiSoft intend to make available an external casing suitable for 3.5-inch hard drives so you can connect your A500 hard

An A500 SCSI drive like this one can be connected to an A1200 thanks to a new product from HiSoft.

drive mechanism to your A1200. Contact HiSoft on 01525 718181. You can access the hard drive from the A1200 via the A500 using ParNet, but it's not very fast. Because CD32 lacks a parallel port, you will have to use SerNet to access it from there. You could do both simultaneously.

You could get hold of *Mac2Dos*, which is quite old and expensive, or you could try *Sybil* from Blittersoft (01908 220196) which enables you to read Mac disks, or you could invest in a Mac emulator such as *Emplant*.

AN INCH TOO FAR?

A friend of mine has a 3.5-inch 340Mb IDE drive installed and running on his PC. Can I take that IDE drive and put it in the IDE slot on my A1200 and, using *HDToolBox*, repartition it and format it using Workbench?

Richard Ambridge, rambridg@encore.com

You can. Obviously Commodore don't sanction this sort of thing because more likely than not you will have to cut the shielding in your A1200 to fit the drive. You can get an adaptor cable, but you also need to get another cable for the power because 2.5-inch mechanisms take their power through the ribbon connector. You could take the power from the floppy power socket, depending on how much current your new mechanism needs.

Because 3.5-inch mechanisms are not buffered in the same way, if they do go wrong you will know all about it. Some of them have very long spin up times as well, so you may not be able to cold boot from them. Other than that, it should work perfectly well with your A1200.

POWER HOUSE

I own an A1200 with a 127Mb hard drive, a Blizzard1220/4 memory board and a Cumana CAX external drive. The problem is that when most programs try to read a disk in the secondary drive I keep getting a window saying something like read/write error and giving me some numbers. Sorry this is a bit vague, but I'm at university and I have left the Amiga at home.

I have *Quarterback* and this seems to run OK with the drive. Plus I used to have the drive connected to my A500 and it worked fine. I remember a command called Failat, so I've tried to find if this is set at a low value for the drive but have not been able to locate the command.

One other question: I have been told if you have lots of things plugged into your Amiga you should upgrade your PSU. Have I reached this limit? I think if I have too much connected the machine would have crashed but this seems a risky way of finding out the limit. Somebody has also told me I could use the power-pack from my old A500. Is this true? I would hate to try only to fry 800 quid's worth of computer.

Glenn Matthews E-Mail

The drive may not be at fault, it could be the disks. How many have you tried? Do they work in the internal drive? If an unfeasible number of disks are behaving in this way, the likelihood is that the drive is out of alignment, so you need to take it apart and adjust the alignment screw.

Failat is a command used in *AmigaDOS* scripts to detect or ignore particular events, like missing files or break commands. This has nothing to do with the operation of your disk drive.

The older power supplies work with an A1200 and give better results when you are jam-packed with add-ons. I think you'll find that you are operating at the limit of your old power supply, particularly if your RAM expansion is full.

C CHANGE

I'm trying to write a simple database, but have got stuck at the first hurdle. I made a struct like this:

```
struct record {        char name[10];
                       char address1[20];
                       char address2[10]
                       etc     etc.     }
person
}
```

INTERNAL TROUBLE

I own an A1200 (doesn't everyone these days?) with an MBX1200z expansion with 4Mb RAM and a 33MHz 68882 FPU. I also have connected a second double-sided double-density disk drive and a CanonBJ10e printer.

Until a month or two back I also owned a 200Mb internal IDE hard drive. My hard drive had no warranty cover and (obviously knowing this fact) it stopped working. One day when I switched on the Amiga, instead of booting from the hard drive, I just got the WB3 prompt – as if my hard drive's boot partition had been wiped.

I now have a two-year warranty with ICL for my A1200 and they have told me there is nothing wrong with it. Thus I have a 200Mb IDE hard drive which, when I tried to prep it with Commodore's *HDPrep* software, gave me a Not Changed prompt in the status window – I used the default parameters written on the disk for prepping and tried to write these to the disk. The ICL engineer tried the hard drive on another

A1200 and got the same response. I have taken the hard drive from the A1200 but don't know how to get it fixed. If you don't have any ideas, could you suggest someone (preferably on E-mail) or a dealer who can help me out?

Naeem G Ahmed (N.Ahmed@cs.ucl.ac.uk)

It seems as though you have a sick drive, and if there is something wrong with the electronics then you may as well chuck it. You say though that HDToolbox reports its status as unchanged, which suggests that it knows the drive is there. Have you tried formatting the drive (not low-level formatting it, as we all know that that is the one sure way to irretrievably destroy an IDE mechanism) from Workbench?

If you boot up from Workbench does the drive appear at all? If you boot up and hold down both mouse buttons, does the drive appear listed in the boot menu? If all else fails, give Trilogic a call on 01274 691115.

and tried to access it with something like:
`person.name="nick"`
but this gives all kinds of errors.

Please help me, and ignore all the typos, but vi on UNIX is shirte (woops, there it goes again).

Nicholas Alexander, Dudley, West Midlands

You haven't started too badly. You have declared a structure more or less. It should go like this:

```
Struct record |
    char *name;
    char *address1;
    char *address2;
    char *address3;
    char *phone;
|
```

Now the structure is there, but no records have been set up. To do this you need to declare an entry, or more usefully an array of entries:

```
Struct record entries[50];
entry[1]= |
    "plop","Plop House", "Plop lane",
    "Plopbury" ,"0898 311322"
|;
```

So there you go. Make sure you differentiate between the structure name and the array name, and all your problems will be solved.

PC FORMAT
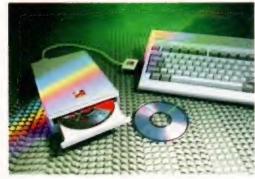
I am currently at college and have to do all of my coursework on PCs running *Windows 3.0* and *AmiPro 3*. My question is this: is there any way to convert text files from an Amiga word processor such as *Wordworth 3* or *Final Writer 2*, to a format that *AmiPro* understands? Would *CrossDOS* be suitable for this purpose, or is there any way to get hold of filters which would enable me to save out text files in *AmiPro* format, and load them back in Amiga format?

Failing this, is there any way to convert the files to *Word Perfect* format?

Adam Nickells, Exeter, Devon

You should be able to read standard ASCII files in any decent word processor, including those on the PC. You may find you have some trouble with linefeeds, but you can change the translation settings in the *CrossDOS* commodity. This is exactly the sort of thing that *CrossDOS* was bundled with Workbench for.

ZAPPO CD-ROM DRIVE

If you've got a Zappo CD-ROM drive, you can boot straight from CD by following this handy tip.

Here's a small tip for everyone with a Zappo CD-ROM drive. Reset your A1200 as normal, but instead of holding down the left mouse button, just hold down the Ctrl-button on your keyboard.

This way you boot straight away from the CD. It's much simpler and faster than holding down the mouse button and selecting the boot option in the menu. Strangely, this shortcut is not in the manual.

I M Steemers, The Netherlands

Well, thanks very much for that excellent tip. If other readers have any tips for using various configurations of hardware and software, please send them in to Workbench.

DISK BOTHER

I have an A600, expanded to 2Mb with a second Zydec disk drive. My internal disk drive developed an annoying sound – a series of short clicks – whenever a disk was being accessed or written to. This was more of an inconvenience than a problem. Then came a major headache.

My Workbench 2.05 has now become a Read Only disk. Thankfully, it was a back-up, but I can't take another copy of it because it is Read Only. I can't even format it and start all over. The only solution I can think of is to format it to a PC disk and then re-format it to an Amiga disk.

When I was decompressing the *Blitz Basic* Coverdisk (*AF52*), another disk went the same way. Both disks were write enabled and I was wondering whether you knew if it is a dead disk drive, a virus or something worse.

Tony Anderson, Billericay, Essex
PS. Since writing this, I have just tried to save it on to a disk and that has gone as well! Help!

I reckon that the little pin that sticks out to check whether the disk is write enabled or not is broken, missing, or at a funny angle. You should take apart the drive and see if the pin (on the left side facing) goes through the hole or not. If it doesn't, fix it in the proper place with some very strong adhesive, such as Araldite.

PASSING THE PORT

I have got an A500 with an A570 CD-ROM and an A590 hard drive. Both use the side expansion port, but neither have a thru port so unfortunately I have to keep removing one to use the other. Is there any way that I can have them both connected at the same time?

Kevin Hammond, Rustington, West Sussex

The A570 is a popular CD-ROM choice for the A500, but can't be used at the same time as an A590 hard drive.

Unfortunately, the answer is no. Theoretically, you could make an expansion doubler and do it, but in practice the interference generated by the hard drive and the CD-ROM would stop either from working properly.

LETTER FROM ISLAMABAD

Please answer my questions and solve my problem because my only source of Amiga knowledge is reading *Amiga Format*.

1. If I buy an A4000 with a 24-bit graphics card such as the Retina ZIII, EGS Spectrum or Talon, what would it be lacking compared to the future AAA machines in terms of graphics capability? The Talon card from DKB features a built-in 64-bit display controller, will this card make the AGA machine fully AAA compatible?

2. If I buy a Multiscan monitor with 0.26 mm dot pitch and frequency range of 23.5-86KHz horizontal, 50-120Hz vertical, will it show all the standard Amiga resolutions, PC SVGA and the highest possible resolutions that a 24-bit card could produce?

3. Are the 64-bit (RISC) processor chip and the forthcoming Motorola 68060 processor the same thing? Will I be able to replace a 68040/25 with a RISC processor?

4. I know that there are two kinds of PC emulators widely available for the Amiga. One is the Bridgeboard type such as *Commodore, Vortex,* and *G Gate* and the other one is the *Emplant 486 DX Emulisation Module*. They both claim to provide

Continued overleaf ➡

PRINTER PROBLEMS
I wonder if you can help me with a printing problem on an A1200, fitted with a 120Mb hard drive and a 6Mb memory expansion, a Canon bubble jet with the Canon printer driver, Epson Q driver or Digita 9-Pin Driver set in preferences.

When printing in *Final Copy*, *Final Writer* and *Pagestream 2.22* the output is not as dark as it is in *Wordworth 2*, the graphics output in *Wordworth* is not particularly good and the text output is not dark enough in *Final Copy*, *Final Writer* and *Pagestream*.

Unfortunately, as it points out in the *Wordworth* manual the Digita 9 Pin Driver can only be used with *Wordworth*. The question is how can you get the other programs to print text as dark as *Wordworth*?

Neil Murtagh, Dalgarven, Kilwinning, Ayrshire

Using a Canon bubble jet with Wordworth can be a problem because of the program's dithering set-up.

Yes, I imagine that the situation you describe could cause problems. Basically, it all boils down to the fact that the Workbench printer driver isn't up to the job. Wordworth probably doesn't dither the graphics in the same way as the other software, meaning that the Wordworth pictures aren't quite as nice as the ones on the other programs. Basically you are stuffed unless you get a driver written specifically for the printer.

The only solution I could suggest is that you choose a black and white mode instead of greyscale, so that the text comes out black. Has anyone else got any ideas about how to tackle this one?

← full PC compatibility at top speed. Why is there such a great difference in price between the two? *Emplant* costs £95.90 from Hobbyte but the Bridgeboards cost several hundred pounds more.

5. If I buy a PAL A4000 and try to run NTSC versions of the software will they work, and will PAL software run on an NTSC A4000? What configuration change is required to convert an NTSC A4000 into an A4000 with a PAL system?

6. How much of the serious Amiga software such as word processors, DTP and graphics programs is available on CD-ROM? I read in a back issue of *Amiga Format* that *Vista Pro V3.0* is now available on a CD-ROM, do you know where I can find it?

7. I want to buy a 3D rendering program such as *Lightwave*, *Imagine 3.0* or *Real 3D 2.0*, which is the best one? I have got the *Amiga Format Imagine 2.0* Coverdisk (*AF53*), can I still upgrade to *Imagine 3.0* by using the form in that issue?

Ahsan Shamin, Islamabad, Pakistan

1. Graphically, I would think that it would compare well. You have to take into consideration that it may not be fully compatible with any AAA hardware which may be released.

2. It will not show any of the PAL lo-res modes, as used by many games, which could be a problem. It would need to sync down to 15.6KHz for normal Amiga screenmodes. You could however use Productivity and DoublePal modes, and possibly Super72. Basically, it works for everything that runs through Workbench because you can select mode promotion and force everything into DoublePal at least.

3. These are not the same thing at all. The 68000 series is based on CISC technology, the RISC chips are quite different. They will not be pin-for-pin replacements. See our RISC feature in *AF66* for an in-depth explanation.

4. The reason the *Emplant* emulator is so cheap is that the PC module is an add-on to the *Emplant* system – you need the *Emplant* hardware to run it. It will probably be a lot better than the Bridgeboard type, but it is not released yet. Look out for the review in *AF* when it does appear.

5. The A4000 was designed to run in PAL or NTSC. You can set this with the boot menu, or if it is a more permanent change, there is a jumper on the motherboard to switch between the modes. Most NTSC software runs on PAL machines, particularly stuff written in the last two years.

6. None really. CD-ROM drives are, apparently, not common enough among Amiga owners to make it worthwhile. There is a CD version of *VistaPro*, but only for the PC.

7. *Lightwave* is certainly the best of the 3D rendering bunch, but if you can't afford it, Meridian are still doing good deals on *Imagine3.0*. Call them on 0181 543 3500.

A whole new world of 3D rendering is at your fingertips with programs such as *Lightwave* and *Imagine*.

In-depth explanation
Memory

RAM expansions can help you get even more out of your Amiga, but before you rush out and get yourself all memoried up, work out how much you need and whether you require Chip RAM or Fast RAM.

1 There are two different ways in which your memory is used on the Amiga. Chip memory is interfaced to the DMA (Direct Memory Access) bus, allowing it to be accessed directly by the CPU or any of the custom chips. Because of this direct access, it is often slower than Fast RAM. Fast RAM can be accessed only by the CPU.

2 The amount of Chip memory you can add to your Amiga is determined by the Agnus chip. Older A500s can only access 512K of Chip RAM. Later versions of Agnus allowed 1Mb or 2Mb of Chip RAM to be added. All new Amigas are capable of having 2Mb of Chip RAM, which is fitted as standard to the A1200.

3 Older sound samplers and most art packages are limited by the amount of continuous Chip RAM they can access. This is because they use the graphics (Agnus or Alice) or the sound (Paula) chip's ability to address the Chip RAM directly to perform some tasks.

4 Some utilities, either provided with Workbench or available from Public Domain libraries, help make the most effective use of your memory. The most useful of these is *FastMemFirst*, which forces programs to use Fast memory in preference to Chip memory.

5 Almost all memory which is added externally to the Amiga is Fast memory. There are many different type of Fast RAM expansion.

6 The trapdoor slots on the A500, A500+, A600 and A1200 are one area used by most third party manufacturers as a path to add expansion memory. Depending on which Amiga you have,

vast amounts of memory can be added this way. Even the humble A500 can have 4Mb added via the trapdoor slot, although this does require some hardware modification.

7 RAM is usually added to the A1500 and A2000 by a Zorro card. Because of their versatile design, almost any memory package is catered for.

8 The main types of memory packages available are DIPs (Dual In-line Package), ZIP (Zig-zag In-line Packages) and SIMMs (Single In-line Memory Module). All have their advantages and disadvantages, but mostly the preference is dictated by which is currently the cheapest, due to fluctuating world demand.

9 Expansion port add ons for the A500 and A500+, such as hard drives, often feature the ability to add extra Fast RAM. The Commodore A590 does so by way of DIPs, whilst the GVP HD8+ uses SIMMs.

10 Memory for the A4000 or the A1200 should be 32-bit wide memory, which is more expensive but much faster than the 16-bit memory used by older Amigas.

11 Memory can have different speeds, which can make a difference to memory-intensive processing tasks. Access times for an average memory device is around 90 nanoseconds.

12 The SIMMs used by most Amigas should be double-sided 72-pin packages. Most expansions will use SIMMs designed for PCs (which have an extra parity bit), but generally GVP expansions will not work with these SIMMs.

Better by design

This month **Richard Jones** looks at designing a newsletter and explains what makes good and bad design and why some of the rules of newspaper production apply to the world of DTP.

One of the many uses you can put your DTP package to is the production of a community newspaper or club newsletter. We see quite a few examples of newsletters at *AF* and to be brutally honest a lot (not all) of them are terrible.

The content is often fine but the presentation leaves a lot to be desired, yet the newsletter is one area where form and content go hand in hand – no matter how good the writing, it has to be presented in an attractive and easy-to-read way if you want to encourage people to read it and get your message across clearly.

The two examples on the opposite page are of good design and bad design. Nobody expects you to create masterpieces straight away, but by following a few simple rules that have their basis in newspaper production, you should be able to create an attractive newsletter.

The key elements that make up both pages – the number of columns (six), the masthead, the pictures and the advertisement are identical but using them carefully and employing a few simple techniques makes all the difference.

The annotations on the opposite page highlight some of the specific faults and good points of the two page designs, but let's consider some of the general elements of desktop publishing and look at how they have their basis in techniques developed in newspaper and, to a certain extent, magazine design.

Columns: In many ways standard column widths are a completely redundant concept in desktop publishing because you can draw a text box across any measure you want and then join it to a text box across any other measure. For example, the first two paragraphs in the lead story on the Good Design page are in one text box which has been linked to text boxes across a different measure.

However, just about every desktop publishing program encourages you to work and think in columns, by giving you the option to determine the number of columns on a page when you first create a document. Most newspapers are still designed very much along the concept of columns where text is usually set across either one or two columns and sometimes across one and half columns – two legs of text across three columns.

Part of the reason for this is historical. In the days of hot metal production, which was only 10 years or so ago, newspapers just didn't have the flexibility offered by desktop publishing programs to quickly change page designs. So, a standard column measurement was a practical means of production. The other reason newspapers, and the pages opposite, use columns is advertising – the most efficient way of selling advertising is to give prices per column centimetre. So, in our examples the *Amiga Format* ad is set across two columns, meaning that the page grid is made up of six columns. But working in columns can restrict creative design – understand why you need them and then ignore them.

Headlines: One of the most liberating aspects of desktop publishing is the ability to change the size of text by a single point. This may not sound any great shakes until you consider that newspaper headlines traditionally stick to very strict type sizes: anything other than 18pt, 24pt, 30pt, 36pt, 42pt, 48pt, 60pt and 72pt was not, and in some cases still is not, allowed. If your headline didn't fit across your given measure in any one of those sizes, tough, you just had to start all over again.

By being able to set your headline in any type size you are able to build your page around the headline, a very different concept to writing the headline to fit the space available.

Working around advertisements: This is a problem that rarely troubles magazine designers because ads hardly ever appear on the same page as editorial. If you have advertising in your newsletter, then you need to plan your page around it.

In the Bad Design example, double column text has been placed directly on top of the double column ad. This gives the impression of extending the ad and distracts both from the impact of the text and the ad. In the Good Design example the text is set across a different measure than the ad, it's in a box and in a bold font, drawing attention both to the text and the ad. If you have advertisements in your newsletter, always rule them off or put them in a 2pt box to separate them from text.

USING COLOUR

You don't need to go to the expense of using full colour to add colour to your pages. It's actually possible to give the impression of colour with a black and white program (such as the *PageSetter 2* Coverdisk from *AF63*) by putting text on a tint background and using white text on a black background – this is known as a WOB (White On Black).

You can also add colour by printing your documents on two plates – one black and one of either the Cyan, Yellow or Magenta plates. For example, our rather excellent *Backstage* subscribers' newsletter is printed on two plates. Any colour other than black on the document (in this case a rather pleasing green) is printed on the second plate of film, and you then tell the printer what colour ink you wish the second plate to be printed with.

It can be tempting to go overboard with a second colour and use it too often on the page – you then lose the contrast between the black and the second colour which rather defeats the object. If you intend to use a second colour it's worth talking to the film bureau and the printers to find out exactly how they want you to prepare your document for output and printing.

Using a second colour is a fairly simple process but can ,make all the difference to a document's presentation. We regularly use a second colour in our exclusive subscribers-only *Backstage* newsletter.

BAD DESIGN

The mock newspaper (bad version)

45p
Thursday
December 15
1994
Published
in Bath

AMIGA WEEK

AF wins
mag prize

AP team get final warning

Amiga Format, the world's best-selling Amiga magazine was today voted Magazine Of The Year.

Editor Steve Jarratt made an emotional speech at the award ceremony in which he paid tribute to the AF team and especially to publisher Dave Carey for their work in making Format the best Amiga magazine in Britain.

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Publisher bites dog!

A dog was recovering at the RSPCA surgery in Bath today, after being bitten by a man described as a publisher. A dog was recovering at the RSPCA surgery in Bath today after being bitten by a man described as a publisher.

The Amiga Format team celebrating their Magazine Of The Year award yesterday.

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WIN an aeroplane P107

The Steve Jarratt interview p23

Keep noise down plea to Shopper

Angry staff at Future Publishing have pleaded with Amiga Shopper editor Richard 'Tricky Dicky' Baguley to keep his staff under control.

The Shopper crew are disrupting magazine production at Future by playing loud music in their office.

BUY

AMIGA FORMAT

Issue 68 on sale Thursday January 17

Annotations (bad design)

Headline doesn't fit: White space can be used to great effect in design, but not like this. The headline is so short it looks as though something is missing and the eye is drawn away from the text to the yawning white space.

Text not boxed off: The double column text would be more effective if it was ruled off from single column text.

All fonts are the same: This page is a disaster, but it might have looked slightly better if it included a bold typeface or at least a different font.

Bad use of text: By placing double column text on top of a double column ad the effect is to extend the ad and distract from the text.

Text flows badly: The text is broken by the picture several times and jumps from near the bottom of the column to the top, making the eye travel almost the entire length of the page to read the story.

Pictures badly used: All the images are situated towards the bottom left of the page drawing the readers' attention to that section of the page.

No horizontal stress: The page reads from top to bottom – there is nothing to break up this 'wallpaper effect'.

GOOD DESIGN

The mock newspaper (good version)

Seriously Amiga: The Steve Jarratt interview P23

WIN an aeroplane P107

45p
Thursday
December 15
1994
Published
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AMIGA WEEK

AF wins top
mag
prize

EXCLUSIVE!

AP team get final warning

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Staff at Amiga Power have been told to grow up and stop playing games all the time according to a source close to the team.

The row started when a company director wandered into the AF office while looking for the toilets and found the entire team playing video games.

"It's a bloody disgrace," he said. "We pay these yobbos to work, not play games all day." Staff at Amiga Power have been told to grow up and stop playing games in the toilet according to a source close to the team.

Publisher bites dog!

A dog was recovering at the RSPCA surgery in Bath today after being described as a publisher.

By Harry Hardnose

The Amiga Format team celebrating their Magazine Of The Year award yesterday.

whole team is totally fab," said Jarratt. "Especially that Richard Jones bloke."

"I don't know what I'd do without them, the whole team is totally fab," said Jarratt. "Especially that Richard Jones bloke."

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BUY

AMIGA FORMAT

Keep the noise down plea to Shopper

Angry staff at Future Publishing have pleaded with Amiga Shopper editor Richard 'Tricky Dicky' Baguley to keep his staff under control.

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Angry staff at Future Publishing.

Baguley to keep his staff under control.

The Shopper crew are disrupting magazine production at Future by shouting, laughing and playing loud music at all hours.

Angry staff at Future Publishing.

Issue 68 on sale Thursday January 17

Annotations (good design)

Filling white space: This headline didn't quite fit either, but instead of leaving it as white space, the Exclusive! logo fills the gap and increases the impact of the page.

Hampers and anchors: A device such as this to 'lock' the top of the page is known as a hamper (don't ask us why). A story that lends horizontal stress and weight to the bottom of the page is, for more obvious reasons, known as an anchor.

Intro text highlighted: The reader's eye is immediately drawn to the most important part of the page – the first paragraph of the lead story. This is achieved by using bold text a point size bigger than the body text across a wide measure.

Bastard measure: Although the page is based on a six column grid, there's no need for the text to be flowed straight into the grid in six columns. Altering the width of the columns helps break the monotony of the text. A column of any width other than that of the standard column width is known as a bastard measure.

Different type sizes: The first paragraph is in 10pt bold, the second paragraph is in 9pt and where it changes measure and goes into the narrower column width it goes into 8.5pt. If it stayed at 9pt it would look too big across the narrower measure.

The filler: It's always a good idea to have a stock of filler stories handy – ones that can be used to fill awkward gaps at the bottom of columns.

Good use of fonts and typefaces. By putting the two smaller stories on the page in a different font and making them bold they are given impact without distracting from the lead story.

Paint Tutorial

In the final part in his series of paint tutorials, **Jason Holborn** explores the effects you can create with the Perspective tool. If you have any questions about paint packages, send them to Workbench.

THE QUICK WAY TO LAY BRICKS

1 The building blocks of a wall. One brick, carefully laid, can last a lifetime. Here's how to use a simple brush fill to create your brick wall.

2 This is our main brush. Windows and doors are just filled rectangles drawn over the bricks. This house will now form the basis of our 3D terrace.

3 Using the Perspective feature of *DPaint*, the house front is multiplied to create a row of houses disappearing into the distance.

4 To give them individual character, colour the doors, and light alternate windows. The sky is a gradient fill and the pavement and roof was drawn freehand.

Concluding our in-depth look at creating realistic images with art packages this month we'll tackle the Perspective mode. This lurks unused by countless Amiga artists, but it can turn simple kiddy-scape drawings into truly professional-looking work.

In this example we'll create a landscape comprised of a single brush, spun in space to give a realistic street scene. If you imagine the card in the example below is a drawing of the front of the house, then imagine it spun in space, you're 90% of the way to understanding this tutorial.

Just like the card, we rotate the house brush once, then move it manually back along the Z plane to create a terrace of homes. The house is a simple rectangle filled with a brick pattern. You can see how this pattern has been created from the illustration – just a few bricks laid properly form the basis of an authentic pattern.
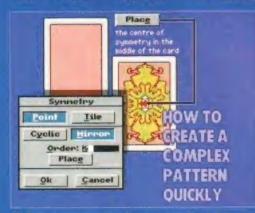
The window, curtain, and door rectangles are filled with solid colour, and a light effect is simulated by having some of the windows filled with yellow. Don't forget to colour the lintels above the windows and doors.

Once the front of the house is completed, cut it out as a brush, and call up the Perspective requester. This brush is angled from left to right, receding as it goes. So press keypad 5 until the X angle reads 40 degrees.

If your brush looks a little large, even at its furthest depth (at the far right of the screen), you can push the image back and forward in space along the Z plane by pressing keys : (colon) and # (hash symbol) while in Perspective mode.

Turn Anti-Alias on to High. With your angled brush outlined on screen, move it to the very left

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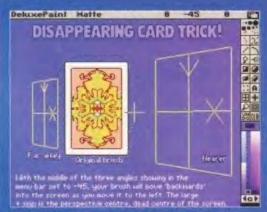
GETTING THINGS IN PERSPECTIVE

HOW TO CREATE A COMPLEX PATTERN QUICKLY

1 How do you turn a boring rectangle into a flashy card? Simply use the Symmetry tool, that's how!

DISAPPEARING CARD TRICK!

2 Here's how perspective works. The card is swivelled and recedes the further left you place it.

The cards retreat back into the screen

3 With AntiAlias on high, your cards are drawn accurately as you place one on top of the other.

This tutorial shows how perspective works and how *DPaint* figures out all the complicated business to give you full range to move objects in and out of space. Drawing an object to give a precise feeling of 3D depth can be quite difficult and it's all too easy to get the perspective wrong but with *DPaint's* Perspective tool, all the hard work is done for you.

Let's have a go at creating an image that uses the Perspective tool. The playing card is the first thing to create. It's a simple white rectangle with the rounded corner effect achieved by erasing the pixel on each corner using the Freehand tool to draw in the background colour. A smaller rectangle

is drawn inside in pink, leaving a white margin. The pattern is interesting – using the Symmetry tool, and the points value set to two, place the centre of symmetry bang in the middle of the card.

Now when you draw in Freehand mode, your pattern replicates on the opposite half of the card. Clever eh! This works with fill colours too, so once the design is done, fill in a few sections to add variety and et voila! – one playing card!

From the Effect/AntiAlias pull-down menu, set AntiAlias to High in order to give the best possible image when rendering. Cut out your card as a brush, and from the Effect/Perspective menu, select Do. Your brush is now shown outlined on the screen,

with a couple of benchmarks showing the top and the right sides labelled X and Y.

You control perspective via the keypad – we want to turn the image into the screen, so alter the Y rotation by pressing keypad 4; the middle of the three figures showing the perspective setting on the menu bar now counts down. Stop pressing the key when the readout is 0 -45 0. Your brush will now have rotated exactly to where we want it.

If you move the brush about the screen, you can see how it re-sizes itself depending on its location. The further left you move, the smaller (further away in space) your brush is. If you look at the illustration, you'll see how the first brush has been

5 Just to add the final touch I used a transparent yellow fill to imitate the lit windows casting pools of light on to the pavement, and added multi-outlined text, filled with the brick pattern.

of the screen and draw it down. It will take some time for *DPaint* to draw the image, but the anti aliasing will make a much cleaner job of it. Once the image is drawn, move the brush horizontally so its edge butts up to the edge of the newly-drawn house front, and paint it down again. Continue like this until you reach the right hand edge of the screen. You should now have created a terrace of red-brick homes.

Unfortunately, they are all the same, but by touching up curtains, front door paint, and adding light to alternate windows, you can individualise them more realistically. The roof is just a filled grey shape against a gradient-filled sky, and the pavement was drawn freehand. A nice touch is the glow of the windows hitting the kerb, achieved with *DPaint*'s Translucency option set to 50%, and a light yellow paint colour.

The beauty of this technique is that it works with almost anything – fences, mountains, trees, even crowds of people. Draw your image in 2D, then make a masterpiece using Perspective.

1 Take one digitised image or even a PhotoCD picture, convert it to a screen mode which can be used in *DPaint* and we have our source image. In this particular case, the image was dropped down to low resolution with 32 colours.
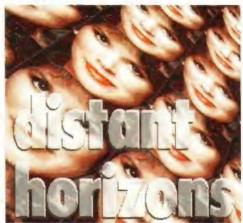
2 The image is then picked up as a brush and rotated using the Perspective tool. Going back to the main *DPaint* screen, we then select the Fill Screen option from the Perspective menu and et voila!

FILL ME IN
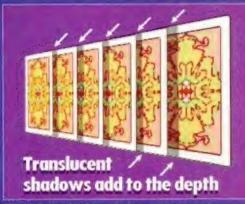
One of the more useful *DPaint* functions when you're trying to create a perspective effect is the Fill requester, and once again *DPaint* does a lot of the hard work for you leaving you to concentrate on the aesthetic, rather than the technical, aspect of your work.

Once you've defined the perspective on your brush, you can fill the screen with an image. This creates some useful background effects, and can even be incorporated into animations using moving Animbrushes (don't get me started on Animbrushes, this is the last tutorial, and I could go on for ages about the joys of Animbrushes).

In this simple example a single image is rotated in space (using -32, 32, 32 to define the X, Y and Z rotation) and used as the Fill type from the Fill requester. *DPaint* works out the depth, and a line of translucent, bas relief text (explained in last issue's tutorial) completes the image.
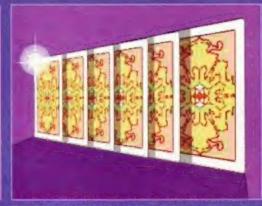
3 Add some text and you have a really striking image. Perspective can come in particularly useful when preparing screens for video work and multimedia presentations.

Translucent shadows add to the depth

4 Add a shadow to the leading edge to create an impression of depth – a quick and simple effect.

drawn at the right hand side of the screen, and subsequent images have been moved a few centimetres to the left, so you get the perspective effect of a diminishing rank of playing cards moving into the screen.

Remember, don't move your brush up or down, just left. If you start rendering the image and find the card is too high or too low, immediately press the Space bar to halt the drawing, and reposition the brush and try again. This can take some time, because the AntiAlias function is quite lengthy, but the end results are far better than we could have achieved without the AntiAlias function. Thankfully, *DPaint* makes the process of moving the brush

5 If you use a light flare and a shadow the impression of depth is further exaggerated.

somewhat easier – simply hold down the shift key and move the brush and move along one axis only.

To further enhance the impression of depth, note the way I've used shadows where the cards overlap. This is quickly and easily achieved by using black as the drawing colour, turning on Translucency and then drawing rectangles down the leading edges of the cards. If the shadow looks rather false, increase the number of screen colours available.

Draw your text on the spare screen, cut it out as a brush, and in the same way as we altered the perspective of the cards, swivel the text inwards to the same angle (0 -45 0), paint it down, cut it as a brush and move back to the main screen.

6 You can then add the text, its shadow and a stunning fill for the finishing touches.

We need to add a shadow before placing the text, so select black as your drawing colour, press F2, turn on Translucency and paint the shadow over the cards image. Turn off Translucency, and paint your perspective text slightly offset so the shadow can be partially seen.

The finishing touches I added were a light source flare on the furthest card to add to the perspective effect. This is simply a couple of Translucent circles of white and yellow with a few straight line streaks. The background fill is a circular range of light to dark blues. Note how an artificial horizon is created by filling in the top and bottom halves of the background separately.

Part 4

OctaMED v5

A 62A

classic channel ker clone. is complete ersion is more powerful than ever before! Make your Amiga sing!

Requires Workbench 2 or better

If you missed our fantastic *AF62* *OctaMED v5* Coverdisk, turn to page 158 NOW and order a back issue!

OctaMED

Ed Wiles explores how you can use the *OctaMED* Sample Editor to add all sorts of effects to your tunes.

Last month we looked at how you can add effects to your music by using the player commands, now we're going to play around with vocal effects by delving into the *OctaMED* Sample Editor.

1 Load in a sample, play it when it's loaded and then click on Edit Sample (upper screen, second row) to open the Sample Editor. The squiggly black line in this window is the sample's waveform, which is a graphic representation of the sample. The Sample Editor is used to change the whole or part of the waveform, which can involve copying sections of the waveform to other places in the sample, changing the volume or pitch of the waveform, creating echo effects, and much more. The white line across the centre of the waveform marks zero volume. The further away from the white line a point on the waveform is, the louder the point's volume.

2 Press the I key to play the sample in note C-3. Now, listening carefully, press the following keys to play the sample at different pitches: P T B Q]. Notice that the higher the pitch, the quicker the sample is played. So pitches are created by playing the sample at different speeds. If you look at the screen

shot below left, you'll notice that the waveform contains seven separate waveform parts (distinct squiggles). Each of these waveform parts represents a separate part of speech. Obviously the waveform display will be different for your sample but the principles are the same.

3 To mark a range over a section of sample, drag the mouse (using the left mouse button) from the start to the end of the section of sample. It should now be highlighted in white. The Range Start and Range End numeric boxes (at the top right of the window) show the actual byte positions of the start and end of the range. Find the Pitch gadgets (these are directly below the waveform on the far right of the display). To change the playing pitch from C-2 to C-3, hold down the left mouse button on the C-2 and press the I key. Release the mouse button. Now to play the marked range at the playing pitch (C-3), find the Play button (it's on the left of the third row of gadgets below the waveform). Try marking ranges over other parts of the waveform, and playing them at different pitches. You can play around with the sample by rearranging and deleting sections of waveform until the order of the words changes.

4 One way to mark a range is to type its byte positions directly into the Range Start and End boxes. Click inside the Range Start box, delete its contents then type 0 and press Return. Now click inside the Range End box, delete its contents then type in a value to represent a given point in the sample and press Return (I'll leave it up to you to decide which value you enter). Hit the Play button to hear the results of your newly edited sample.
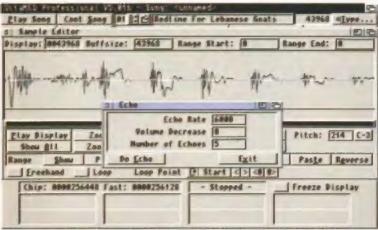
The *OctaMED 5* Sample Editor provides all the tools you need to edit existing sampled instruments and you can even sample your own with a sampling cartridge.

In this example, we've highlighted a word in a vocal sample. Once highlighted, this word can be cut out and pasted to another section of the sample.

Marking a section of a sample tells *OctaMED* to concentrate all operations on the ranged data in that section.

The words within a vocal sample such as this can easily be identified as each individual word is displayed as a series of peaks.

Tutorial

NEXT MONTH
EVERYTHING YOU NEED
TO KNOW ABOUT USING
OCTAMED AND MIDI

OCTAMED TUTORIAL

JANUARY 1995

The Sample Editor provides a range of special effects which can be applied to your samples. In particular, the echo effect can be used to add reverb to a sample.

Zooming in on a sample displays a far higher level of detail, allowing you to edit it with greater precision.

JUST LOOK AT THAT EFFECTS MENU
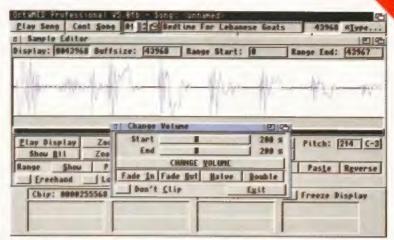
● **Change Pitch:** if the pitch is lowered, the sample becomes longer, and vice-versa.

● **Mix:** mixes the current sample (source) with the copy buffer (destination), storing the result in the current sample.

● **Filter/Boost:** filters (reduces noise) and boosts (brightens) the range. Averaging affects strength, crank Distance right up for some weird effects.

● **Create Noise:** adds noise to the range at the specified level.

● **Create Chord:** creates chords of two to four notes from the current sample. Specify the chord's notes by pressing the keys while holding the left mouse button on the pitch boxes.

5 Next we'll remove a section of sample. Roughly mark a range over a section of sample. Now to accurately adjust the range's start, hold down the Shift key, hold down the left mouse button on anywhere to the left of the range (the grey area), then drag the mouse left or right and the Range Start display will change. To adjust the range's end: hold Shift, hold down the left mouse button on anywhere to the right of the range, then drag the mouse until you're happy with the Range End. Play this range by clicking Play, then delete it using Erase. Play the whole sample using the keyboard.

6 To copy and paste a section of sample to the start of the sample we need to extend the range to the very end of the waveform: hold down Shift, then drag the mouse over the waveform to the very right of the screen. Now to cut the range to the Sample Editor's copy buffer, click Cut (beside Play). Set both Range Start and Range End to 0 by clicking inside each of them and pressing Ctrl-X, 0 and Return. Now paste the copy buffer at the Range Start position by clicking Paste. Click Show All to display the entire sample. Play the sample using the keyboard; it should sound very weird indeed.

7 Next we're going to try out one of *OctaMED*'s special effects: echoing. We'll echo the end of a sample so that the sample slowly fades away. First we need to add some extra space to the end of the sample; this extra space will contain the echo. To increase the total sample size to, say, 70,000 bytes, activate the Buffsize numeric box (above the waveform), press Ctrl-X to clear it, then enter a value larger than the total sample size and press Return. Click Retain in the requester that appears. Notice the extra space that appears at the end of the waveform. Now change Range Start and Range End so the start position is about two thirds along the total length of the sample and the end position is at the very end of the sample (for echoing, you need to range both the echoed part and the extra space). Play the range using the Play button.

8 Now open the Echo window by selecting Effects menu -> Echo. The meanings of the three numeric boxes should be fairly clear (don't worry about Volume Decrease). Change the Echo Rate from 400 to 6,000 in the

usual way (the actual definition of Echo Rate is the number of bytes between the start of each echo), and set Number of Echoes to 5. Now click Do Echo. When it's finished (it takes my A500 38 seconds), close the Echo window and play the sample. Notice that there is a lot of extra space after the final echo. We could range the extra space and click Erase to remove it, but there's an easier way: select Edit menu -> Remove Unused Space. Note that the sample size is now significantly less.

9 Next we'll look at changing the sample's volume. Mark a range over the whole waveform by clicking Range Display (in the window's centre). Now take a 'snapshot' of the sample by clicking >Buffer. This copies the whole sample to the copy buffer; it can be retrieved later using the paste tool. ◆

AND THERE'S MORE

● Use Zoom In and Zoom Out to magnify and reduce the display. The display box shows how many bytes are currently being displayed. Use the black scroll bar or the <left> and <right> keys to move around the sample.

● Click Play Display to play the current display. When you've finished, click Show All to display the whole sample.

● Using Freehand you can modify the waveform by drawing with the mouse, just like *DPaint*. The display size is 628 bytes maximum, mind.

● Use Loop and the Loop Point gadgets to set a repeating section of the sample. Switch Loop on, then drag the black pointers using the mouse or use the <> <0 0> buttons.

● If you have a sampler, Monitor and Digitize do your sampling for you.

● Reverse turns the range backwards. Now you can find out whether Queen's *Another One Bites The Dust* really does contain the word marijuana played backwards (trust me – it doesn't, it's a kind of maaaoooooaaaannnnaaa sound).

● Invert (Edit menu) turns the range upside-down. Practically useless.

● Chop (Edit menu) removes the whole sample except the part marked by the range.

● Play Buffer Contents (Edit menu) allows you to listen to what the copy buffer's saying.

● Discard Copy Buffer (Edit menu) tells the copy buffer to shut up.

The first animation booster to follow in the steps of the Raptor Plus *Lightwave* rendering engine is the SHAblamm card which fits most PC compatibles with a VESA slot, and includes *Windows NT* and 16Mb of Cache RAM.

Now, before you start thinking that you're reading a PC mag instead of good old *AF*, consider this: the Raptor Plus is a RISC PC running under *Windows NT*. The SHAblamm card contains a 133MHz RISC processor, (like the Raptor), and the RAM is rated at 15 nanoseconds, (yep it's fast!), and can render *Lightwave* scenes around eight times faster than an A4000.
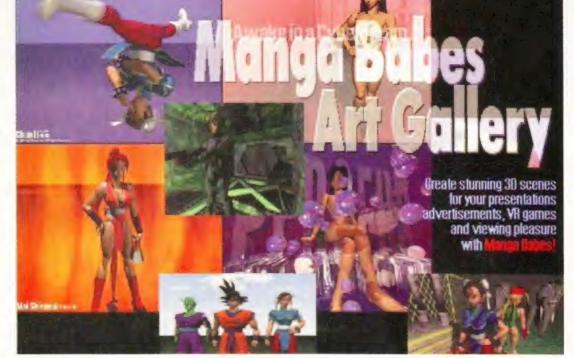
Of course, to use this card in conjunction with an Amiga, you'll need to buy *ScreamerNet*, and an ethernet card with network software. The card comes in two forms: with 16Mb RAM, for about £1,800 plus VAT, or as a complete system with host PC for around £2,800 plus VAT.

For further details, contact Direction Technologies on 01483 454400, and mention that you're interested in using the SHAblamm card with *Lightwave*.

LIGHTWAVE HINTS AND TIPS

Lightwave 3.5 owners may be experiencing difficulty in using the package with their machine. The major cause of most problems is insufficient RAM. To run effectively, your Amiga should really be fitted with 8Mb RAM and even then it may not run smoothly. Here is a list of other common *Lightwave*-related problems:

● **Modeller unable to load at all.**
This is generally caused by a faulty Workbench. Reinstall Workbench.

● **Crashes when using Segment memory**
This can happen if you don't have a minimum of 8Mb of RAM, but if you enter a Segment memory number such as 99999999999, *Lightwave* reports back a message saying there is not enough free memory to support that size. However, if you click on the Continue button, it calculates the correct configuration.

A new Shareware collection of manga-style models featuring three exquisitely-designed 3D models in *Imagine* TDDD format, is now available from the 24Bit Club.

Send a disk with return postage to the 24Bit Club at 6 Skirsa Square, Floor One, Glasgow G23 5QW, or it can be downloaded from the 24Bit Club section of the Black Hole Bulletin Board (0121 421 4835) which is a UK Fido Echo for users of *Lightwave*.

Create stunning 3D scenes for your presentations, advertisements, VR games and viewing pleasure with **Manga Babes!**

The latest news, tips hints and advice on 3D rendering from the 24Bit Club. Contact them on 0141 946 2191.

● *Lightwave* crashes when using *Power Macros*, or *WaveMaker*.
Axiom Software say that the fix is to load the scene into *Lightwave*, don't press Continue, but save the scene out, and reload it back in again. The problem is due to a bug in *Lightwave* 3.5, which does not set up a default light in the scene. No lights – bang... program crash! Saving out the scenefile makes it into a *Lightwave* 3.5 compatible version.

● **Errors in Modeller when using fonts or Boolean operations.**
This is a known Modeller bug, and you should use the update patch disk to cure this fault. The new *Lightwave* Modeller update can now be downloaded from the 24Bit Club section of the Black Hole Bulletin Board (0121 421 4835) or send a disk and the return postage to the 24Bit Club at 6 Skirsa Square, Floor One, Glasgow G23 5QW.

HOLO-ART COMPETITION

Earlier this year, the 24Bit Club ran the Holo-Art competition in which you could get your 3D rendered picture transformed into a full-size glass hologram. Entries have arrived from all over the world, and here are a couple that have impressed us so far. The 24Bit Club hopes to release a video of all the entries shortly.

Spongs of experience

The Son Of Spong! in all its glory. From here you can go into either the *Amiga Format* or *Amiga Shopper* areas.

Richard Baguley explains exactly what happened with the *Amiga Format* Bulletin Board Spong! and introduces the all new Son Of Spong!

AMITCP GOES COMMERCIAL

Version 4 of the Amiga networking software *AmiTCP* has been released as a commercial product. Previous versions are still available, but now there is a fully functional demo of Version 4 available on the Internet (on any Aminet site). A whole host of new functions have been added, including several rewritten utilities and optimised versions of the programs for use with faster processors.

There is also a printed manual which goes with the program. A single-user version of *AmiTCP 4* costs £61 (plus £4 p&p). I'll be taking a look at the full commercial version of *AmiTCP* in a future issue. Further information is available from info@nsdi.fi.

Many months ago, when I was a lowly staff writer on this magazine and the deadlines seemed so much further apart, I had a great idea. Why not start up an *Amiga Format* Bulletin Board? After all, we were already spending several pages every issue telling people how fabulous Comms is, so why not provide them with an easy way to get into it?

So, we put one of our machines in the back room, wired up a couple of telephone lines and we were away. I spent several evenings configuring the software and several more loading files and generally making sure everything was all right. We got a Fidonet Node number and started getting mail. It all seemed to be working all right, so we decided to let our readers loose on it.

Although I had expected it to be busy, I never anticipated the sheer volume of calls that we received, with several hundred in the first few days. In fact, it was so busy that we were unable to call out for any mail, because immediately after someone hung up, somebody else would call in.

Although being busy wasn't a problem in itself, the response of the callers was. Many people expected the entire magazine and every Coverdisk we'd ever done to be freely available. Although some of the news and PD mentioned in *Amiga Format* was there, Spong! was designed to be an additional feature of the magazine, not something that replaced it.

Things started to go a little bit wrong from then on. Shortly after I'd spent a lot of time setting up a large number of file areas from a CD-ROM drive, an error on the hard disk caused the loss of several of the configuration files. Fortunately, I had backed up most of the files on the BBS, so all I needed to do was to restore them from the back-up. But this turned out to be corrupted as well. Faced with the complete loss of

most of the control files for the BBS and many hours of work to recreate the file areas and menus that formed the BBS, we had to ask what future Spong! had. Unfortunately, we really didn't have the time to invest in getting the BBS back up and running.

So what have we learned from the Spong! experience? Two things: firstly, running a BBS takes a hell of a lot of work and secondly, some Comms users are ungrateful so-and-sos who don't appreciate our efforts.

The moral of the story? We promise to put a lot of effort into making Son Of Spong! work – and don't forget the hard work that your local Sysop puts into keeping a BBS running. Just take a few minutes to say thanks every now and then and don't forget to buy them an orange juice if you happen to meet them down the boozer.

Getting into Son Of Spong! gives you access to all sorts of wonderful things, including the PD programs reviewed in *AF*'s PD Update and Demo Zone.

SON OF SPONG LIVES! (01482 442251 or 01482 473871)

Fancy making your opinion known? Why not leave *Amiga Format* a message on Son Of Spong!?

Although Spong! has gone, we have made alternative arrangements and can now introduce Spong2! which has been combined with an existing Bulletin Board in Hull (Metnet Triangle) to form Son Of Spong!.

This allows you to send messages to both *Amiga Format* and *Amiga Shopper* and to download the PD and Shareware programs reviewed in both of those magazines. You can even use Son Of Spong! to enter any competitions in the magazine (although you need to know the answers first, of course).

Metnet Triangle Bulletin Board (and Son Of Spong!) can be contacted on either 01482 442251 or 01482 473871 (modem numbers).

Mailbag

Send your letters to: Letters To The Editor, Amiga Format, 30 Monmouth Street, Bath, Avon BA1 2BW.

SOFT LOGIK SPEAKS

I read with interest the review of *PageStream 3* in the November issue of *Amiga Format*. I am not disputing the rating *(22% – SJ)*, nor the valid criticisms, but there are several glaring errors in this review.

AF: 'The program crashes whenever you try to load it'.

This is a blatantly false statement. How could Mr Dyson have made his screenshots if *PageStream 3* crashed every time he tried to load it? What basis was there for this statement other than to disparage *PageStream 3*? None of the thousands of people using *PageStream 3* have reported this problem, so it was a surprise to see this statement in your magazine.

AF: 'You can almost forgive Soft Logik for it being two years late'.

It was exactly one year and two weeks later than the original announced release date.

AF: 'Values in the box cannot be doubled-clicked to highlight them for editing, so you have to click and delete'.

The Mac OS and *Windows* allow this functionality – *AmigaDOS* does not. It is hardly fair to criticise us for not implementing something which is not supported in the Amiga Operating System. When versions of *PageStream* for Macintosh and *Windows* are released, users will be able to double-click to select text in a text string.

AF: 'Text can often not be re-coloured in PageStream 3 *'.*

PageStream 3: was our reviewer Marcus Dyson decent, honest and truthful?

The text colour feature is not implemented yet, so Mr Dyson could never have coloured it even once.

AF: 'BME (Bitmap Editor) is not too good at choosing palettes'.

If Mr Dyson had read the manual, he would have learned that the pen colours used to display pictures in *BME* are chosen by *AmigaDOS*, not by BME. He compared *BME* to *AdPro*, which is comparing apples to oranges. *AdPro* renders an image to a separate screen so it has control over all pen colours on that screen.

BME displays pictures in a window on a public screen, which means that some pen colours are already assigned and reserved by *AmigaDOS*, and that pen colours must be shared. If *BME* rendered to a separate screen like *AdPro*, it would be free to work the same way as *AdPro*. But because *BME* allows users to edit their pictures in an *AmigaDOS* window, it must conform to the Amiga colour allocation system.

Hopefully, you or Mr Dyson will correct these errors in a future issue of *Amiga Format*. It is sad to see sloppy journalism in a magazine in which you personally guarantee thorough testing.

> **Michael Loader,**
> **Soft Logik Publishing,**
> **St Louis, USA**

And Marcus Dyson replies…

Soft Logik are right in some areas, and I would like to apologise to them for any misrepresentation of their product. On a point-by-point basis:
1) I was referring to the fact that PS3 crashed whenever launched under a partial installation. I ran the program and obtained my screenshots under a full installation, but people who do not have 11Mb of hard disk space free would not be able to run v3.0 of PageStream.
2) I was not referring to the original announced release date, but to the fact that when I took over as editor of Amiga Format in January 1993, Soft Logik were already promising review copies to the magazine "within a month".
3) I was not criticising either Soft Logik or the Amiga operating system. I was just pointing out a lack of functionality the potential user will have to face. It is a pity that the Amiga OS does not allow double-clicking on text strings in requester boxes, I m sure that if it did Soft Logik would have implemented it.
4) I used PageStream 3 a lot, it crashed a lot, and I had to re-start documents from the beginning a lot. This was a frustrating and confusing experience,

during which I was sure that I had managed to re-colour text at some point. I accept that I was wrong.
5) I was not comparing BME to AdPro, I merely pointed out that a 24-bit picture reduced to 256 colours in AdPro and displayed in BME was superior to one palette-reduced in BME itself despite the fact that both these images use the same pen colours.

Despite my comments in the review, and the disappointing score, I look forward to Soft Logik defeating the considerable teething problems that PageStream 3 is experiencing. I am sure the product has what it takes to be a superb DTP package, and can't wait to try a fully-featured and stable version on my machine.

I will (I hope I am right about this Steve) be reviewing an updated version for Amiga Format as soon as Soft Logik release it (sounds good to me – SJ).
> **Marcus Dyson**

PIRACY SOLUTION

I think that I might have solved the problem of software piracy.

I think it would be a good idea if companies sold a demo of the game on the shelf or by mail for, say £5, instead of the full game. On the disk would be information of how to purchase the full game and the price. If the customer liked the demo they could then buy the full game. However, if the customer, after reading the reviews and trying the demo, decided the game wasn't worth buying they would not have the heavy burden of knowing they had burnt a £25 plus hole in their wallet and therefore would not be lured into piracy.

Could you please inform some software houses for their opinions, maybe you could start a debate with other readers to get their ideas. What do you at *Amiga Format* think about it, would it work?
> **John Fielden, Halifax**

I don't think selling cheap demo versions is a bad idea. But one of the excuses used by people who pirate, or receive pirated games, is that they wouldn't have bought the game anyway, so the publishers don't lose out.

One of the great Shareware successes has been Doom on the PC,
Continued overleaf ➡

CHEAP SAMPLE

A couple of months ago I was browsing around the computer shops in the centre of Liverpool when I noticed a pre-release demo version of the Bullfrog game *Theme Park* selling for £2.99 on the PC. I don't know if there was ever a similar demo for the Amiga version of *Theme Park* because I haven't been to any computer shops since.

I work in the retail record business and I know what a difference a cut-price sampler makes when it comes to the consumer purchasing a full-price version of the product. This idea also shows that the manufacturer has every confidence that the product is good.

So, I say a big well done to Bullfrog and keep up the good work. Let's hope that in the future every software house catches on to the same kind of idea.
> **Carl Sixsmith, Westhead, Lancs**

Well, every demo that appears on an Amiga Format Coverdisk performs the same function, so it's hardly a

All (well some) of the fun of the fair was made available to PC owners on a £2.99 Theme Park demo.

new idea is it? We've been doing it for five years! Still, it's a commendable service: let's hope more companies take note.

← whereby the first level was put out as PD over the Net, and then people who wanted the later levels had to register with id Software. So maybe that's the way things will go in the future...

THEME PARK 1

My warning is about the Electronic Arts game *Theme Park*, which I bought for my A1200 which has 4Mb of memory and a 200Mb hard drive. Anyway, to cut a long story short, I installed *Theme Park* to hard drive to discover it consistently crashed from anything like five minutes to one hour into the game.

After wasting several hours trying different things suggested in the troubleshooting guide. I gave up and phoned the helpline. I was informed that the problem is with the game itself. Apparently, this is because it hadn't been tested with all types of Fast RAM and the only way I can play it is from floppies because the game then doesn't use more than 2Mb.

The fact *Theme Park* was installed to hard drive was one of the major selling points for me and consequently I have now returned the game to John Menzies.

Ex-EA customer, Alan Scott, Fife

We've had a few complaints about Theme Park so we're collating all your comments to send to EA. If you've found any bugs write to us at the usual address and mark your letter Theme Park.

THEME PARK 2

After eagerly reading your exclusive review of *Theme Park* (AF63 91%) I quickly ordered it from a mail order company. Firstly, I had to wait for several weeks before receiving it (probably not your fault), and

secondly after reading the manual discovered that I need 2.5Mb RAM before installing it on to my hard drive (A1200). This was not mentioned anywhere in your review or do you assume everyone has spent £100 or more on an expansion?

Richard Stone, Nottingham

Ah, yes. Steve McGill has come clean and accepted that this was an error of his devising. But neither EA nor Bullfrog actually told us you need 2.5Mb for the installation to take place (why 2.5 Mb!?) and, unfortunately, our A1200 had a RAM expansion up its bum when Theme Park arrived.

However, it seems that EA were also caught on the hop – Theme Park boxes now have a sticker on the front mentioning the fact. If you've got a copy which isn't hard disk installable on your Amiga, send it back and ask for a refund.

TESTING TIMES

A bug-free version of *Wordworth* was achieved thanks to the beta testers.

1) In reference to Mr Gleave's letter (AF64, Beta By Design) in which he asked how to become a beta tester, I would like to inform you of my experience. When I saw Silica's discount offer for *Wordworth 3.0* in AF, I decided to upgrade and was

Continued overleaf ➡

THE BITS ON THE SIDE...

Just a little note to say how much I like the Subscribers' Superdisk. I think it's wonderful. It's probably my favourite part of the magazine, because it is always interesting and has some nice things on it.

James Prior, Waterlooville

Aw shucks! All just part of our on-going plan to make subscribers love us even more. And if YOU don't subscribe, just listen to that nice Mr Prior.

I am writing to you concerning the 3D graphic software *Playmation* (AF56). You said it was not available in the UK then but I was wondering whether it is now? If so can you give me the address of any stockists and the price?

If not could you suggest other equivalent 3D software that would run on an Amiga 500 with 1Mb upgraded memory?

Christopher Parry, Wirral

Even though Cineplay Interactive are based in Vancouver, there's no reason why you shouldn't order Playmation from them. Their order line number is 0101 206 750 0042 – you'll either need to send an International Money Order, which your bank can organise, or pay by credit card. The complete Playmation 1.4a package costs $299 (plus $50 postage) which comes to £164 – according to the current exchange rate of 2.13 $Canadian to 1.00 £UK.

Two points regarding issue 64:
1) The review of *Simon The Sorcerer* on CD³². I agree that using the CD³² controller drives you into an insane, hysterical, gibbering wreck, that's why I used the mouse as per the manual's instructions, and thoroughly enjoyed the game (personal rating 93%).

2) Why on the front cover has it got written under the Future Publishing logo your guarantee of video where normally it has written your guarantee of value?

John Moore, Manchester

1) We can't rely on every CD³² owner having bought a mouse as well. But point taken.
2) This is what's known as a 'gag'. Since the cover, main feature and a large proportion of the serious pages were dedicated to desktop video on the Amiga, we thought it was funny to desecrate the otherwise sacrosanct legend of Future Publishing. Sort of.

I am an accountant who uses double-entry bookkeeping. My son has an A1200, and I want to know if it's any use to me in my work which is basically accounts and taxation for sole traders and partnerships.

Teddy Daniel, Birkenhead

Only last issue, we reviewed Easy Ledgers 2 which earned itself a 94% AF Gold for being especially great at just this very subject. If you have a hard drive and fancy a bit of double-entry action, contact Small Biz Software on 101 61 7491 9190 and be prepared to part with £180.

In the October issue you showed two fruit machine games programmed by John Ingham, but you didn't state where they can be obtained from. Can you tell me where I can buy them and the cost?

C Washbourne, Cheltenham

Hmph. You didn't read the text very closely did you? Both Licenceware games are available for £3.99 from F1 Licenceware at 31 Wellington Road, Exeter, Devon EX2 9DU.

RE: TALES OF RETAIL

I note the comments made in your recent article with regard to technical support for Amiga users (The Jeff Walker Column, AF64). We are a small family-owned computer dealer, struggling to survive the low margins on Amiga products. I agree with many of the points made in your article, but I must disagree when you mention lack of expertise as a reason dealers cannot help.

We try to provide the best service we can to our customers, which includes fitting upgrades, installing software, fixing naff disks, installing printer drivers, holding hands with people who can't be bothered to read the manual and much more. All this time is paid for from profits and we would love to be able to employ more people to provide a better service. We have been guilty of the 'take it to where you got it or ring the software house' syndrome. We have no choice.

Profit margins do not allow us time to play with all the software and hardware we stock to give us the technical expertise that you consider we are lacking. I agree with your comments on training, it is however usually impossible to obtain a leaflet or point of sale material from distributors or manufacturers, let alone training. Commodore are major culprits here.

Mail order firms start up, undermine the market, and go out of business. Any idiot can sell product at mail order prices and go broke owing money to distributors and publishers. The list as you know is very long. This is all paid for by the dealers still in business and the buying public. We cannot match mail order prices and stay in business, but the public seem to think that we are profiteering and making a fortune.

The small dealer is the backbone of the Amiga market, we try to help where we can but our resources are limited more by financial restraints than an unwillingness to train staff. We are now selling more and more PC products, not because we want to but because this is the way the market is leading, especially with the Commodore situation at the moment.

You are our customers, you pay our mortgages, without you we would not be here, but it is hard out here, the hours are long and the rewards not great. As far as we at Computer Store are concerned we will still do our best, but it is becoming harder to provide the service customers expect and deserve and stay in business.

Give me a ring, come and see us and see the other side of the counter for a day, you are being unfair tarring us all with the same brush.

Roger Godsafe, Computer Store, Essex

Over to Jeff...

Perhaps unwittingly, Roger, you have confirmed pretty much everything I said in that column, and in an earlier column about how cutthroat dealers were in undermining the Amiga market. OK, I suggested that lack of expertise was normally the reason for poor after-sales support, but before that I suggested that low profit margins were also a reason, the implication being that low profit margins equal little or no training, the end product being poor after-sales support.

Low profit margins is one of the excuses you tabled for it becoming harder for you to provide the after-sales service the customer expects and deserves, and still stay in business. Profit margins do not allow us time play with all the software and hardware. Your words. If I tarred you, it seems to me that you added a topcoat.

In your defence you have pointed your finger at the lack of support you have received from manufacturers and distributors, and from Commodore themselves. Fair point, and one which I too made. It's such a shame that the tone of your letter is that the writing is on the wall. Just because you are selling more PC products does not mean that Amiga owners should be treated as second class citizens. They might want to buy a PC one day...

one of the many who received a great, but very bug-ridden product.

I wrote to Digita, detailing all the bugs I'd found and offered a few suggestions. I also added that if they required any more beta testers, I'd be pleased to oblige, and detailed my set up. A few days later I received a letter from Digita asking me to fill in a non-disclosure form, and later another with beta versions of v3.0a. This letter is being written in another version I'm evaluating.

Concerning piracy of beta versions, Digita personalise copies before sending them to us, so they can identify any leak.

2) From what I can gather, *Backstage* is written well in advance of the issue it goes out with, reminiscing on the news of the past month. I would prefer a *Backstage* written towards the latter stages of the mag, so that any news too late to be printed in the mag could be passed on a month earlier to us special readers. If there's no late news you could describe the chaos that occurred creating that issue of the mag.

3) When you provide us with CG fonts, either on Coverdisks or Subscribers' Superdisks, please check the quality of them. Zfutura (on *TV*Text Pro*) has an error on the letter Q, and the letter C in BauhausLight and the letter U of BauhausThin are obvious problems which make both fonts useless. May I suggest that the alphabet is typed in lower case and capitals in large and small sizes to locate these errors.

Jonathan Day, Lincolnshire

Yes, Backstage *is written weeks before* Amiga Format *goes on sale; we simply can't prepare* Backstage *any later because it has to be printed ready to be inserted in the finished Subscribers' magazines. Such are the rigours of magazine production. For instance, I'm answering these letters on November 8 (my birthday, as it happens). Then I'll do* Backstage, *which has to be finished by… er… oh. Tomorrow (yikes!). And the magazine doesn't actually go on sale until December 15!*

We did tell you to ignore Zfutura because it was included as a last-minute bonus, but was later tested and found to be unusable. The Bauhaus fonts obviously slipped through our net, but Jason Holborn assures me that he always runs the fonts through Typesmith *to check their quality and integrity. I don't think you'll find fault with any of the recent fonts we've given you.*

SET FOR ADVENTURE

Back in the dark ages, I owned an Amstrad CPC464, and I remember there being some decent adventure creators available, the most popular being *Graphic Adventure Creator,* and *The Quill.* Well, now, I own an Amiga 500+ with 2Mb of memory, a 42Mb

Black Dawn was created in AMOS, which just happens to be on the Coverdisk.

hard drive and Canon bubblejet. Quite a step up.

Anyway, in the October 1994 issue of *Amiga Format* there were two graphic adventures, *Starbase 13* and *Black Dawn* (*PD Update, p19 – SJ*); I would like to know what program these were written in because I am a budding adventure writer, but the likes of *AMOS* are just not dedicated enough for the production of quality adventures – not in my experience.

If you would be so kind as to tell me what program each of these adventures were written on, then I could produce some great adventures! Anyway, if not, is there a PD adventure creator? I haven't seen one. Please help.

**Andrew Thelwell,
Budding Adventure Creator,
Stoke-on-Trent**

Good news and bad news. Bad news: they were both written in AMOS! *(As well as the fruit machine simulators on the same page). Good news: this issue has* AMOS Pro *on the Coverdisk, and over the coming months we'll be telling you just how to get the most out of this astonishing package. With some technical knowledge and a little imagination, I'm sure you'll be knocking out great adventure games every half an hour – or so.*

FAULTY MOTION VIDEO

Thanks for allowing me to let off steam regarding the MPEG demos on the Coverdisc of the *Amiga CD32* magazine. I have decided not to go overboard and complain regarding the quality of these demos but I genuinely feel this Coverdisc has put back the case for MPEG encoding by ten years.
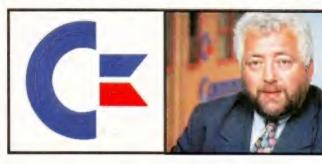
To be fair the article in the magazine regarding MPEG was excellent and I hope you will set the record straight with editorial in *AF* to clear the confusion as to what this demo was or what it was supposed to do – it certainly was not MPEG to the standard laid down.

**J Blackburn,
Multi Media Machine,
Bolton**

I agree that the demos were misleading to say the least. They were MPEG encoded files, but running under software decompression – that's why they were so slow. The demos were intended to show MPEG technology at work, but, er, didn't. Just ignore them, OK?

THE MAN AT THE TOP

Write to Commodore UK managing director David Pleasance c/o *Amiga Format*, 30 Monmouth St, Bath BA1 2BW.

I am a regular reader of the Future magazine *Edge* and have noticed that it has little faith in the Amiga or its future. Intentionally or otherwise, at every possible chance it says how inferior it is compared to the PlayStation or Saturn, yet defends the 3DO. I am writing this letter to you and not *Edge* because everyone who has written to *Edge* to defend the Amiga (me included) has been fobbed off with them dodging the questions.

Far be it from me to tell you what to do, I can only advise you and make you aware of the situation that persists in *Edge*. It would not be so bad if *Edge* were another cheap magazine – but it's not, the reverse is true. It is in fact the best-presented magazine available and on the whole it is well written. It is taken seriously by consumers and the software industry alike and was voted magazine of the year at the Indin Industry awards.

What I think is needed is for somebody with clout, such as yourself, to write to *Edge* and defend the Amiga. *Edge* covers the future of interactive entertainment, surely the Amiga is part of that and should be taken seriously within its pages. Because this magazine holds a lot of weight, thousands of Amiga sales have undoubtedly been lost already, if something isn't done, thousands more will be.

Nick Donnelly, Ely, Cambs

I'm sorry you're unhappy with the lack of Amiga coverage in Edge. I agree with you that Edge is a good magazine, and I for one welcome its arrival. It's a measure of the size and diversity of the games industry that we have so many different titles – and opinions – to choose from. You need have no fears about the future of the Amiga as an interactive entertainment platform. I realise that over the past few months the Amiga may have seemed to be rather low profile. But we're tantalisingly close to completing our management buy-out and as soon as it goes through, we'll be able to tell the world about all the great plans we have for the world's favourite home computer. I guarantee you'll be delighted.

Thanks for your support.

I visited some friends in Norway and used their A500+ for playing games, writing letters and generating pictures. It didn't take long before I realised that this was the computer for me. Returning home to Latvia I've tried to get an A1200 but unfortunately I haven't found anyone who sells it. Credit cards aren't available here so I can't order goods directly from the UK.

The computer market in Latvia is saturated by IBM machines. But Commodore could do well by marketing Amigas for university students and schools. Some of them still have ancient Russian-produced computers with 32K of RAM. As far as I know there are a handful of Amiga users in Latvia and they have a common problem of getting software as well as hardware for their machines.

So my problem is where to get an Amiga. And I have several questions:
1. Are there any Commodore dealers in the Baltic States (Latvia, Estonia and Lithuania)?
2. If not – are Commodore going to establish an Amiga Centre here soon?
3. If not – would it be possible for Commodore to send me an A1200 with 80Mb hard drive and Frontier Innovations and/or Desktop Dynamite Pack, cash on delivery?

Girts Bensons, Latvia

Thanks for your letter and welcome to the worldwide band of Amiga enthusiasts.

I appreciate your problem obtaining an Amiga in Latvia. You may not be aware that Commodore International went into liquidation earlier this year and the Commodore UK management team is currently trying to buy the whole Commodore business from the liquidators. We're nearly there, and we've been talking to distributors all over the world. I don't think we've spoken to anyone directly from the Baltic States yet, but I'm very interested in what you say about the potential market for Amigas there. I will look into the possibility of appointing a distributor as soon as the buy-out is complete. We don't sell direct at all – but hopefully you'll find an Amiga distributor near you before long.

Gallery

THE GUARD *By Hugh Johnson, Coventry*
Star Wars fans should recognise this shady character from the last in Lucas' famous trio of sci-fi films, *Return Of The Jedi*. This beautifully-drawn Gamorean Guard took time out from guarding Jabba's fortress to pose for Hugh. The entire image took over 50 hours to draw using nothing more than *DPaint IV* running on an A1200. Enjoy your Tabby Graphics tablet, Hugh!

DMA Design are giving away a Tabby Graphics tablet worth £54.99 for the best Gallery picture. Plus, you could be commissioned to produce artwork for DMA, the team behind *Lemmings* and *Hired Guns*. Please indicate clearly if you don't want your details passed on to DMA. Send entries to: *Amiga Format*, Gallery, 30 Monmouth St, Bath, Avon BA1 2BW.

Jason Holborn wades through another hefty Gallery postbag to bring you a selection of the best in *Amiga Format* readers' artwork.

ARTHUR C CLARKE
By J Austin Taylor, Kingston-upon-Hull
Drawing a famous person is perhaps the toughest task an artist can take on because the picture is judged on the likeness rather than artistic merit. In this case the artist scores very well on both points.

FRIENDSHIP
By Keith Rhodes, County Durham
This fantasy picture was created by Keith using only *Brilliance* and loads of patience. Keith claims that he spent over 80% of the time taken to create this image working with *Brilliance*'s Magnify tool.

HELL RAISER
By Martin Edwards, South Glamorgan
Clive Barker's Pin Head character is a very popular subject for *Amiga Format* Gallery artists. Drawn using *DPaint IV AGA* on an A1200, the restricted colour palette gives this image an eerie feel.

BACK LADTRA 2
By T J Coraldean, London
Based on the Disney movie *Lady And The Tramp*, Mr Coraldean's image captures the warmth and colour of Disney's early animations. Note the superb use of high contrast colour ranges to produce depth and to accentuate the effect of the light source.

PORSCHE 944S
By Auburn Hodgson, Cleveland
The A1200's AGA chip set may be ideal for creating great artwork but, as Auburn proves here, an A500 is still a useful artist's tool. Drawn by hand using *DPaint III*, Auburn has made considerable use of gradient fills to create the illusion of more colours.

SUN BABES
By S P Pang, Brisbane
This picture was constructed and rendered using an A1200 equipped with a GVP A1230 '030 accelerator. The software used was *Imagine 3*, *DPaint IV* and GVP's *ImageFX* rendering program. Worth noting is the clever use of brush maps on the bikinis.

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AMIGA FORMAT *PRESENTS*

Issue 68

On sale Thursday January 19

Next month we'll be telling you how you can get in the fast lane of the Information Superhighway with your Amiga, a modem, a telephone and a few bits and pieces of cable and some software.

Don't get left behind, we'll point you in the right direction and put you in the driving seat with the definitive *Amiga Format* guide to Comms, the Internet, the Worldwide Web, Bulletin Boards, CIX and more... much, much more.

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AMIGA SHOPPER supplement

Get a free taster of our more technical sister magazine!